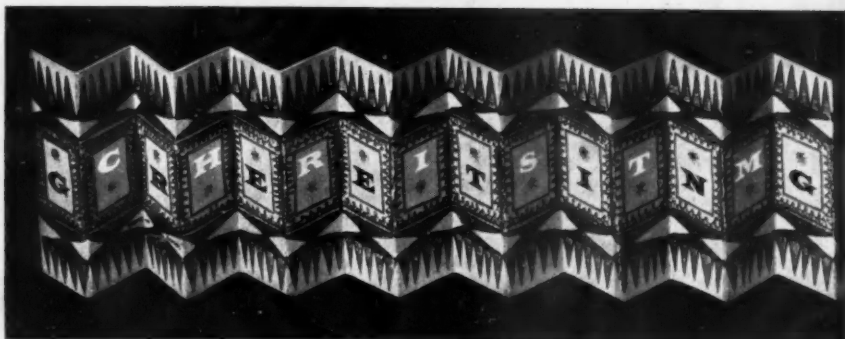


Art + Tech

Council of Industrial Design

December 1956 No 96 Price 2s 6d

Design



HILL U. LIBRARY

DEC 27 1956

PERIODICALS

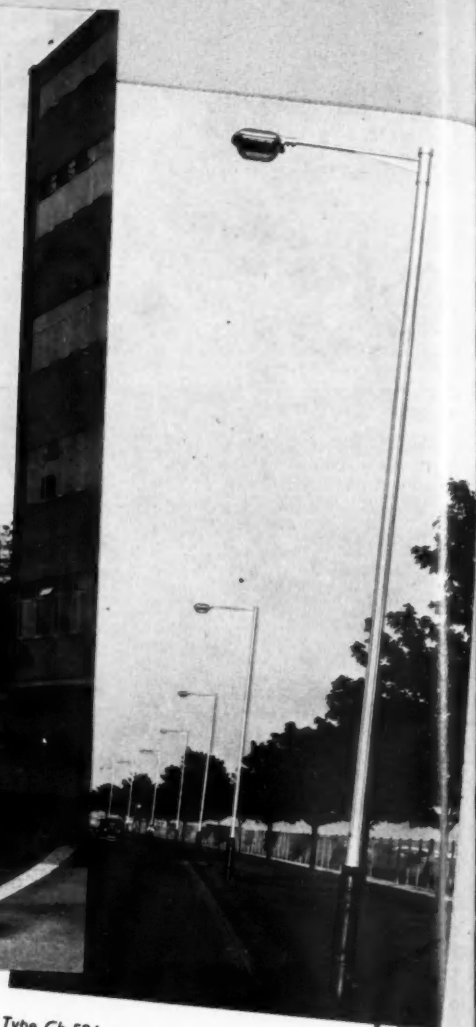


Type Gb.587, installed in the Borough of Solihull.

Type Gb.965A. These columns, fitted with Siemens 'Kuwait' lanterns have been installed at Coventry.



Type Gb.584, seen in position on the A.4 road outside London Airport.



TUBULAR STEEL LIGHTING COLUMNS

Shown above are three examples of our 25 ft. mounting height tubular steel lighting columns for Group 'A' roads.

This is one of a series of advertisements illustrating our range of lighting columns as approved by the Council of Industrial Design. Other designs, plain or fluted, for 13 ft., 15 ft. and 25 ft. mounting heights, will appear in the series from time to time. A brochure giving details of our standard columns will be sent on request.

STEWARTS AND LLOYDS LIMITED

GLASGOW • BIRMINGHAM • LONDON

S&L

The largest manufacturers of steel tubes in Europe



MIDAS, son of the goddess Ida, was rewarded for looking after the drunken Silenus, with a gift of his own choosing. Being a greedy monarch, Midas chose that all he touched should turn to gold. It did so, including food and drink as soon as they touched his lips, which greatly inconvenienced him. It is no use being irresponsible about metals as Midas was. They play an important part in our lives, especially aluminium and its alloys which, although not generally considered a substitute for three square meals a day, may be used in a multitude of other ways and possess such qualities as lightness, durability, resistance to weather and great strength.

THE BRITISH ALUMINIUM CO LTD

NORFOLK HOUSE ST JAMES'S SQUARE LONDON SW1



G.E.C.

STREET LIGHTING



The large range of G.E.C. street-lighting equipment is made up of specially designed lanterns and concrete columns to fulfil the individual requirements of all main and side road lighting schemes.

The services of G.E.C. street lighting engineers are always at the disposal of local authorities to give advice and prepare complete lighting schemes without obligation.

*G.E.C. lanterns are
designed for use with*

Osram
LAMPS OR TUBES

THE GENERAL ELECTRIC CO., LTD. MAGNET HOUSE, KINGSWAY, LONDON, W.C.2.

Design

Number 96 December 1956

CONTENTS

EDITOR

Michael Farr

EDITORIAL ADVISERS

Sir Gordon Russell

Alister Maynard

Paul Reilly

J. Noel White

Peter Hatch

ART EDITOR

Kenneth Garland

ASSISTANT EDITOR

John E. Blake

EDITORIAL ASSISTANT

Gillian E. Naylor

PRODUCTION

Aubrey Hewitt

STAFF PHOTOGRAPHER

Dennis Hooker

BUSINESS MANAGER

Arthur Sudbery

EDITORIAL

CIRCULATION

ADVERTISEMENTS

28 Haymarket, London SW1

Tel: TRAFALGAR 8000

AND 46 West George St, Glasgow, C2

Tel: Glasgow Douglas 3914

Yearly subscription rate:

United Kingdom 30s post free

Design may be obtained from
booksellers at home and abroad

Manufacturers are invited

to consult the Council

of Industrial Design's

RECORD OF DESIGNERS

a free service of recommendation

and introduction of designers

to industry

17 Yule trade

18 Pointers

19 Teamwork at London airport J. Christopher Jones

New headquarters for the British Overseas Airways Corporation have recently been completed at London Airport. A high standard of interior design has resulted from close co-operation between the corporation's management and design staff, and a team of consultant designers

24 Art schools and industry

The extent of industrial design training is still limited but, through concentration of effort, may benefit from the recent Ministry of Education decision to withdraw its recognition from certain courses. Individual achievements in three schools and colleges are discussed and illustrated

28 Christmas cards

Last year readers of DESIGN were invited to send in Christmas cards they had received and liked, and a selection of these illustrating current design trends is reviewed in this article

34 Review of current design

36 Showroom for lighting equipment

37 New designs for street furniture George Williams

A miscellany of some of the latest developments in street furniture design, including a student's design for a telephone kiosk, a bus shelter, and a project for a new Shell service sign

42 Photo-elasticity for the product designer L. Bruce Archer and Bohdan J. Zaczek

The fourth article in this series discusses the structural aspects of design. The illustrations show all stages in the photo-elastic analysis of a typical product

47 Better looking universities Maurice de Sausmarez

This article, one of a symposium on 'The Arts and the University' published in the 'Universities Quarterly', discusses the role the universities can play in furthering good design

49 Overseas Review

Germany - Large scale design for carpets is influencing British firms

USA - Film credit titles can be a new source of imaginative work

USA - American ability to produce traditional English silver at low cost shows the need for British silversmiths interested in dollar markets to develop a modern English style

Switzerland - New furniture shows fresh opportunities for plastics mouldings

55 News 61 Letters 65 Books

TODAY'S PROBLEMS IN INDUSTRY

Cutting Assembly Costs



One of industry's big production costs is the assembly of component parts. It's an important cost, expensive in time, in labour, and often in materials. In zinc die casting, however, an answer has been found that combines economy with quality production. Take the component part shown here, for example. It forms part of a cone winder used in cotton spinning and consists of six zinc die castings. So accurate were the die castings that no machining was needed, except for tapping holes used in bolting the parts together. That means a big saving in assembly time, in labour costs, in waste. However complicated the shape, zinc die castings have clean and accurate surfaces. Justifiably this process is claimed to be the shortest distance between raw material and finished product.

Write for list of members and publications describing the properties and uses of die castings to



ZINC ALLOY DIE CASTERS ASSOCIATION

34 Berkeley Square, London, W.1. Telephone: GROsvenor 6636

Comment

YULE TRADE

THE CHRISTMAS TRADE is one of the high spots of the retailing year; the official statistics show that more goods are sold in December than in any other month, provided there are no war scares or interim budgets which upset the normal pattern. It is a special event; stocks are bought in months ahead, and the staff mustered and often augmented for a public buying spree of formidable proportions. As the shopping days slip by and the shoppers' list gets longer with last minute but none the less essential additions, the shops begin to bulge, the hard pressed sales staff becomes more resolute and the public distracted to the point of desperation.

People who at other times can be relied upon to choose with care and discrimination a useful and well designed wedding present, seem to lose their grip in this season of goodwill and send to their friends and relations gifts of the most reckless futility which they would not for one moment harbour in their own homes. None but those of iron will escape the mounting hysteria and maintain their standards of judgment; the rest of us become bobbing corks on the tide of Christmas trade promotion. And with the public casting discretion to the winds and behaving in such an irresponsible and irrational way, it is not surprising that some shopkeepers offer Christmas goods of an indifferent character.

In these circumstances the Design Centre slogan 'Look before you shop' seems especially apt and there must be many heavily laden housewives who fervently wish that they had, on returning to their own hearths to wrap up their purchases. A few shops have indeed established a reputation for attractive Christmas presents at reasonable prices, but there is a marked contrast between what they offer and the general run of the market.

Not many years ago the average standard of Christmas cards was so low that there seemed a danger they would fall into disrepute and perhaps vanish altogether from the chimney piece. Some publishers, however, were convinced that there must be a market for cards of good graphic design and they commissioned talented artists to produce something which interpreted the traditional Christmas spirit in a modern way. Such enterprise has done much to remind us that Christmas has a meaning as real now as in the days of stage coaches and crinolines. Maybe it is not too much to hope that the same can now be done for the rest of the Christmas paraphernalia. That indeed would be a happy Christmas for all our readers.

Pointers

DESIGN enlarged

Starting next month **DESIGN** will be published in a format one sixth larger in area than the current size which was adopted when the magazine began in 1949. During the past eight years our paid circulation has risen from a handful of enthusiasts to over 10,000. The editorial scope has widened so that now, on the average, we introduce a new aspect of design each month. This policy of expansion has been met partly by an increase in thickness from 24 pages to the current average of 64. But the problem proves to be as much visual as numerical: both illustrations and text on each page need more room to manoeuvre. So, the new format will be introduced to make **DESIGN** considerably larger at a moderate extra cost. The new price in the UK of 36s per year post free (or 3s per copy) will operate from January 1 1957. In the interval **DESIGN** subscriptions may be booked at the old rate by completing and posting the enclosed subscription form.

Motor spacemanship

Violent contrasts in design were more apparent at the recent Motor Show at Earls Court than for many years past. With few exceptions, new models from British firms left little to indicate that a concern for improved appearance had been carried much further than the choice of a new colour scheme or the rearrangement of chromium trim.

The opposite extreme was glaringly apparent on the American stands where it seemed that the last obstacles to the fulfilment of comic strip, science fiction dreams had been removed. Wider, longer, lower than ever before, bristling with phoney air intakes, jet motors, turbine blades, gun sights, tail fins and electronic whatnots, the American car is fast entering a realm in which common sense standards are a thing of the past. The Buick 'Centurion', a dream car in glass fibre complete with rear view TV and delta wings, is no longer a car in the accepted sense. The space ship idiom (forecast in **DESIGN** for May 1955) is definitely with us - but what it is doing on the highways of earth is anybody's guess.

Only the Italians, it seems, have been able to find that mixture of elegance and practicality in appearance which is the motor industry's greatest need.

Second revolution

The great British achievement embodied in the nuclear power reactor at Calder Hall has received world-wide recognition. The honours go to the scientists - from physicists to civil engineers; what credit is left for the architects of the buildings? When Calder Hall was opened it was said that electricity from either the atom or from coal could cost the same, provided the network for distribution was not too long drawn out. Coal fired power stations, though dirty, are accepted within the limits of most cities; how

much more desirable will it be to build 'clean' atomic stations in the midst of each big demand for power? We are not suggesting that an atomic power station should be neatly sheathed in glass and steel like an office block, or that it should in any way pretend to be something which it is not. But, as the first station in the UK Atomic Energy Authority's large programme, Calder Hall could have been much better looking in human, aesthetic terms - both as part of the landscape and as a place in which to work. The first industrial revolution created chaos in design; the atomic age could do better - as perhaps the authority realised when it commissioned Hulme Chadwick to provide the Royal dais, below, for the opening ceremony.



TEAMWORK

at London Airport

BOAC called in consultant designers to set a high standard for equipment in the new headquarters



The new BOAC headquarters at London Airport contain the main maintenance hangars, stores, workshops, offices, boardroom and management quarters. ARCHITECT Sir Owen Williams and Partners.

J. CHRISTOPHER JONES

DURING THE LAST FIVE YEARS new headquarters have been built for British Overseas Airways Corporation at London Airport. This building, carried out in concrete in the very personal and starkly uncompromising style of Sir Owen Williams, contains maintenance hangars, stores, workshops, the operations and administrative offices, the board room and executive quarters. The equipment and interior design are the result of lengthy and ambitious efforts by the corporation's staff, various technical and management consultants and Design Research Unit. The decision to make the best use of outside consultants and to aim at a high standard of design throughout was taken by the past deputy chairman, Whitney Straight, and the results achieved owe much to his interest and encouragement.

The designs shown here are chiefly the result of collaboration between the BOAC technical staff, and Misha Black and Kenneth Bayes of DRU. The most accomplished parts of the work are the senior management quarters. These are a further essay in the combination of rich materials and modern design which we have come to expect from DRU. The attempt to reach equally high standards in the whole of the working areas – hangars, workshops, offices – has by no means been successful, but enough has been done to show the very marked improvement that trained designers can make in workshop premises and equipment. Those who are familiar with factory interiors will realise how difficult it is to maintain an attractive and logical design in the



1

1 The board room at the new headquarters overlooks the main engineering hall. The woodwork and furniture is in walnut, the carpet is dark grey and the navy blue hide chairs are a standard BOAC design. DESIGNERS Misha Black and Alexander Gibson of DRU.

2 The chairman's dining room for entertaining visitors is panelled in walnut with recesses in coarse textured paper. Tables and chairs are walnut and upholstered in blue-grey hide. The carpet is dark grey and the lighting fittings are red leather on brass frames. DESIGNERS Misha Black and Alexander Gibson of DRU. GENERAL CONTRACTOR Holloway Bros. (London) Ltd.



2

Teamwork at London Airport

layout and equipment of a workshop. A tradition of doing the job with the crudest benches, racks, bins, chairs and lighting fittings has first to be broken down.

Better design respected

The most interesting results can be seen in the radio and instrument repair shops, where a new type of light engineering bench is in use. The development of this began with a survey of instrument and radio repair workshops at leading Continental airports. It was found that most of these had already made special benches which were of a higher design standard than is commonly found in industry; BOAC was able to profit by the experience gained. At London Airport it was decided from the start that the cost of the improvements in bench design should be related to the expected increase in working efficiency. It was estimated that a two per cent increase in productivity would pay for the new benches over a period of 10 years. It is too soon to tell whether this prediction is correct, but the planning staff is confident that the increased output which is already being obtained in the new workshops can partly be attributed to work bench improvements.

The final design has followed a long series of consultations, many trials and much redesigning. Particular care was taken to obtain the opinions and preferences of those who would subsequently work on them. The new benches have been very well received and those who were accustomed to the old equipment were astonished by the colour, the high quality and the care which had obviously been taken on their behalf. Their appreciation has had good effects. After nearly a year in use there are no signs of damage or rough treatment to bench tops, and a pride in the working equipment has led to careful handling.

3 The type of repair bench previously used.

4 A praiseworthy attempt to raise the standard of design in shop floor equipment. The new standard bench for instrument and radio repair was developed after a long series of consultations and trials. The new bench is constructed in agba, with steel legs, under-frame and footrest. The top is grey matt 'Formica' and the finish generally is polished hardwood. The side panels to drawer units are pale blue and the back panels are grey. The light is a standard Hadrill and Horstmann counterpoise lamp with refinements worked out by the designers. The stool is a standard 'Tan Sad' covered with bright red plastic cloth.

DESIGNERS Misha Black and Kenneth Bayes of DRU. MAKER Geo. M. Hammer & Co Ltd.

3



Design: Number 96

The possibilities of achieving a comfortable working posture for the various tasks carried out and for all sizes of men do not seem, however, to have been fully explored. Two indications of this can be noted. Some of the original foot rests, which can be seen in, 4, have been lowered by the addition of brackets made in the shop; noticeable wear on the legs of the swivel chairs shows that these also have been used as footrests, although they were not designed as such. It is clear that adequate resting surfaces for the feet have not been provided and that the question of posture could have been more exhaustively studied at the research stage. Another detail altered by the users is the position of the waste bin. Initially this was placed inside the kneehole to serve the bench in front, and in this position it could be periodically emptied without interruption of the work. In the case of the radio benches it has been found necessary to remove some bins to the bench side so that solder and waste materials can frequently be swept over the edge into the bin. But despite these defects the benches are a great encouragement to those who believe that factory equipment can be, and should be, well designed.

Apart from the instrument and radio benches and related equipment, control room and labels shown here, most of the colour schemes and many details such as lighting fittings, desks, partitions, notice boards, charts and canteen equipment have been designed or selected from manufacturers' stock by DRU. Now that the consultancy has come to an end these items have been recorded in a 'Standards' book which is intended to guide the corporation in any further developments which may be carried out.

4



Teamwork at London Airport

5 Benches in use in the instrument repair shop.

In addition to the bench shown in 4 and 5, each item of equipment used for repair work has been redesigned. 6 and 7 show various prototypes for small parts trays. 8 is a rubber covered tray now in use for holding equipment during repair, and 9 shows alternative designs of fluid jar bases; the wire ring version has now been adopted. DESIGNERS Misha Black and Kenneth Bayes of DRU.



6



8



7



9

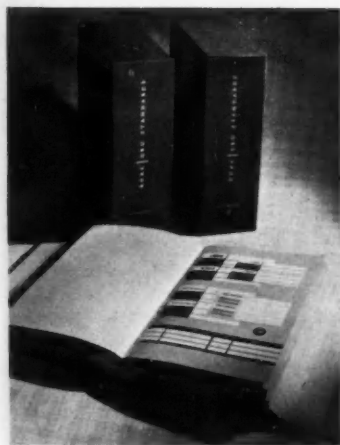




10 Movement control room at BOAC headquarters using standard 'Roneo' desk equipment modified by the designers. DESIGNERS Misha Black and Kenneth Bayes of DRU. GENERAL CONTRACTOR F. W. Clifford Ltd.

10

12 Most of the design work carried out by DRU is recorded in a 'Standards' book which can be used by BOAC in further work: an aid to the "eternal vigilance" mentioned by Alec Davis in 'House Style' (DESIGN November page 19). The open page shows a new design of bin card for use in stores.



Design: Number 96

11 Labels for goods in transit redesigned to give a pictorial impression of the inscription. Previous designs are shown on the left. DESIGNERS Misha Black and Ronald Sandiford.

FRAGILE



GLASS



RADIO EQUIPMENT



INSTRUMENTS



URGENT



23

Art schools and industry

MUCH CONTROVERSY has resulted from the recent decision by the Ministry of Education to withdraw its recognition from full time courses in a number of art schools in England and Wales. The object – to rationalise and concentrate art training on a regional basis instead of dispersing it over a wide area and a large number of schools – does, at first glance, seem fundamentally sensible and will perhaps help to curb the wastage of art school trained students. But some of the schools from which Ministry recognition is being withdrawn (early reports suggest there are 55–60 out of a total of 170)* may justifiably feel that specialised training has been removed from centres of industry where it might be most effective, eg Kidderminster, or that some schools that have developed particular subjects in which they have achieved high standards, eg graphic design at Lincoln, will suffer unfairly.

The Ministry does not of course run the art schools, plan the courses or appoint staff. These responsibilities are the concern of the local education authorities and the principals. The Ministry's contribution is primarily to set examinations and to approve those courses which will provide students with the knowledge and skill necessary to bring them up to examination standard. If the Ministry withdraws its recognition from a course it does not therefore mean that the course cannot be carried on. But it does mean that students cannot acquire the qualifications which are demanded in the teaching profession and to a lesser extent in industry. Thus the role of these schools whose courses are no longer recognised may tend to change from that of vocational training to recreational training – part time classes for those to whom art and crafts are hobbies.

At the same time it must be remembered that a large part of the training given in the majority of provincial art schools is already designed for part time students. Those full time students who are seriously bent on a career in art or design will probably derive little harm, and often considerable benefit, from attending courses at larger centres where better facilities in the form of equipment and specialised tuition are to be expected.

Training designers for industry

Training in industrial design is likely to be less affected by the changes than the classes in fine arts and crafts. Most schools offer courses in some form of design, but by far the majority of these deal with the craft basis of the industry concerned – furniture, pottery, textiles, silversmithing, bookbinding – or with the graphic arts. Very few, even of the larger schools, include courses on industrial design as such (ie product design in metal and plastics), and these courses remain unchanged. It is certainly misleading to suppose that the mention of an "industrial design department" in a school prospectus is a real indication of the type of course available; often it is used merely as a general term to embrace a miscellaneous collection of craft subjects and interior decoration.

Of the provincial schools, apart from Newcastle-upon-Tyne, a new school where courses are only just beginning, and Leicester, where the course is approved but in abeyance, Birmingham is the only school with an established department for product design. In London the

* Quoted by J. Marchbank Salmon, principal, Lincoln School of Art, speaking at the annual conference of the Association of Art Institutions, "Times Educational Supplement", July 27.

LCC Central School of Arts and Crafts has built up a reputation in recent years for thoroughness of teaching practice, and much creative but realistic work. The Royal College of Art, which is independent of the Ministry, is also beginning seriously to tackle the problem of training designers for the product engineering industries.

New trends in three schools

The illustrations on the following pages are not a comprehensive selection of work in art schools throughout the country. Rather they have been chosen to show isolated events during the past year which are of unusual interest. In this connection the Canterbury College of Art should be mentioned for taking the unusual and imaginative step of holding its recent annual exhibition in London, where the opportunity for potential employers to see the work of students is immeasurably increased.

New textile school

Regional College of Art, Manchester

Manchester, the heart of a great textile producing area, has for many years lacked a flourishing centre of training for textile designers. Recently however strenuous efforts have been made by the Regional College of Art to satisfy the requirements of the local industry and thus to fulfil what should be the college's primary function.

The latest development in this process was the opening, earlier this year, of new premises for the textile school, where for the first time students have the equipment and space necessary for their work. Under the energetic direction of the department head, Ralph Downing, the school has been fitted out with photographic processing and enlarging equipment, with excellent facilities for screen making and printing, and a section for dyeing, steaming and washing, etc. Although essentially a school of printed textiles, hand Jacquard and dobby looms are included so that students can learn to understand and appreciate the nature of the material with which they will be working. The library, including a collection of historical fabric samples, and garden, where students can draw plant forms in their natural setting, reveal an approach which recognises the creative rather than the technical foundation from which imaginative textile designs can grow.

Links with both the wallpaper and textile industries have been established, and the plan to provide special courses



1 Two screen printed fabrics, left, by Pauline Seward, right, by Sylvia Byrne.

Art schools and industry

for studio designers should do much to strengthen this. The admission of 10 students a year to the school shows also a realistic approach to designer training and an understanding that it is quality rather than quantity which is the fundamental characteristic needed in designers for the Lancashire textile industry.

2 This design, by Freda Walsh, was awarded the Warner Memorial Medal in this year's Royal Society of Arts Bursary competition. The design has been bought by Tootal Broadhurst Lee Co Ltd and is now in production.

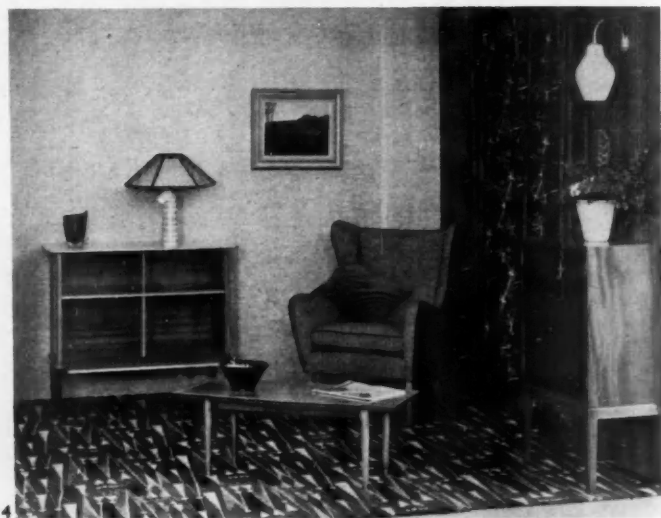


Design training for craftsmen LCC Technical College for the Furnishing Trades

This technical college has shown remarkable progress in design during the past four years. The courses are planned to provide training for all branches of the furniture trade – furniture making, upholstery, workshop practice, factory organisation, management, etc. The technical nature of much of this work might seem to exclude any concern with design matters. However, the principal W. J. Kape, together with the instructor in design B. A. North, has fostered a sound understanding of design in the modern idiom as a basis from which his students can develop their various skills, and as far as possible students design their own pieces before making them. The exhibition of students' work earlier this year was easily the best so far and some of the exhibits are illustrated here. The fact that craftsmen, managers and technicians of all types will be entering the industry with this basic sense of design is to be welcomed, and cannot fail in the long run to exercise a beneficial influence on furniture design standards generally.

3 Dining room furniture designed by B. A. North. Sideboard made by Alan Bridges and Anthony Ashfield, table and chairs by students of the design research group, curtains by part-time soft furnishing students.

4 Demountable cabinet designed and made by Ibrahim El Daw. The occasional table, arm chair and record cabinet were designed and made by part-time day release students, curtains by part-time soft furnishing students.

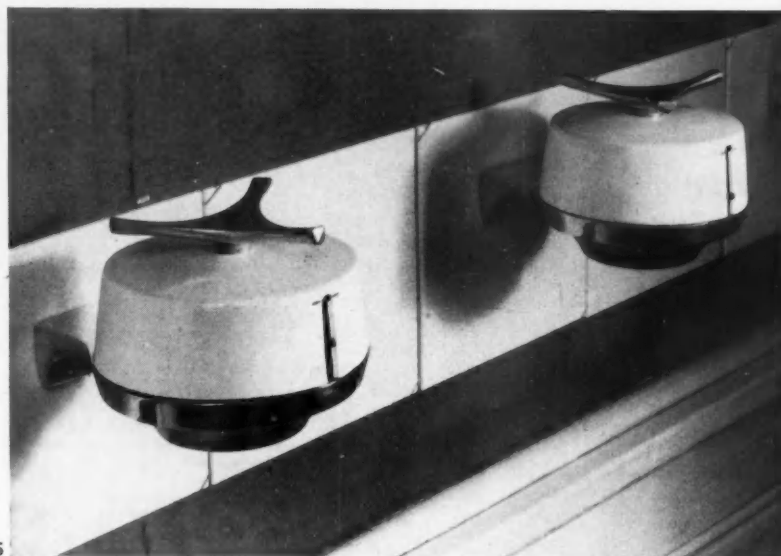


Group project

*School of Industrial Design,
LCC Central School of Arts and Crafts*

One of the most imaginative and successful educational experiments in product design training has been the series of group projects carried out during the past three years at the Central School. The object – to demonstrate the close link that designers in the mass production industries must establish with the planning and production departments if their work is to be of real value – has been achieved by several realistic pilot manufacturing schemes. All stages of the work including the design, operational planning, the making of jigs and tools and an initial production run, are carried out by the students themselves in groups of about five. The first of these schemes, for a hospital lighting fitting, was described in *DESIGN* for October 1954. The most recent, for a solid soap dispenser, is illustrated here. This scheme was a second year project operated by a working committee of students with a staff instructor in the chair. Specifications were prepared by each student; all ideas were discussed fully and one design finally chosen, though the result was a synthesis of all their ideas. The year's work fell into three main sections. In the first term all the design work and model making were completed. Detail planning and tooling occupied the second term while the final term was devoted to production. Working in this way as a team, it is clear that the advance planning stages are of great importance if the work is to be completed on time. But perhaps the most benefit for the student is derived from the need for accuracy at all stages of the work. There can be no second thoughts once the tools are made – and it is not until the final term that the students will know if all the components will in fact fit together.

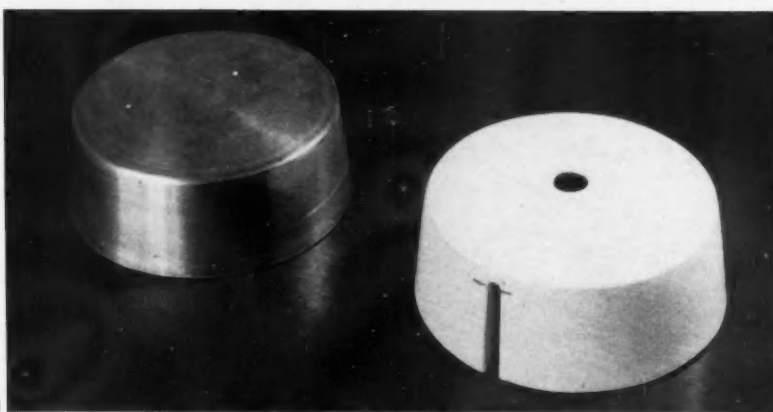
Whether or not individual projects are successful is not in itself of great importance – the teaching staff believes that students are more aware of the difficulties if mistakes are made. The real problem is to teach an understanding of the *practice* of design – and this has been one of the school's greatest achievements.



5



6, 7



8

5 Two of the 15 solid-soap dispensers designed and made by five students – Alan Copp, John Stewart, Rajinda Bawa, Robert Hidden and William Harbour.

6 Aluminium alloy sand castings for the base of the dispenser. Patterns and trial castings were made in the school, but for convenience the bulk of the casting was contracted out. Machining and finishing on buffers were carried out by the students.

7 Sand cast handle, 'Tufnol' ring with cutting blade and cake of soap – specially moulded in the school.

8 Spun aluminium covers. The slot for the indicator shows how much soap has been used and also prevents the soap cake from revolving.

There was an excellent response last year to our request for Christmas cards, and a small selection of those that our readers received and thought interesting is illustrated here, mainly to indicate design trends. If we take the output of the trade as a whole, this selection is unrepresentative, but we think it shows more than a portent.

CHRISTMAS CARDS

The sending of Christmas cards is now an established custom of greeting that goes far beyond the family circle and, because of its ephemeral nature, is proving a field for design that is not too serious or self conscious. Although the choice of subject is wide, the limits of this choice must be strictly observed, or it will not be a *Christmas* card. The most common themes are: Father Christmas, pine trees and evergreens, snow and ice, Madonnas, angels, candles, chimney pots and pieces, olde tyme (especially obsolete transport), hunting, the family and home, dogs and cats, gluttony. In all of these it is the manner – the style in which the card is produced that is most important. Although there is some striving for novelty of construction or finish, the most successful cards seem to be those that take a well tried idiom and treat it in a new way. Thus a Christmas card is not commonplace because it illustrates a robin or a piece of holly, but only if it does so in a commonplace manner. The problem here is to be religious without being sanctimonious, witty rather than waggish and – most difficult of all – tender or romantic without *kitsch* sentimentality.

Although the motives and motifs are extremely varied, the cards have been roughly classified into three groups – those that are specially produced for the sender (personal), those that come from a company or group of people (business), and those that one buys at a stationer's.



Personal Cards

The most imaginative cards are usually the personal ones, either designed for the sender or made by him, for here the circulation is limited, and closely reflects the sender's own taste. The strictly Christmas idiom can be lightly indicated if the personal quality is

strong. Because personal cards have only to demonstrate the unique nature of the sender, they offer most scope for ingenuity; the designer is his own client, even when he drafts the work for someone else to carry out, and possibly they offer a better opportunity than any other medium for uninhibited design.

1 A nineteenth century sign writer's 'model letters' are used as family initials. DESIGNER Robin Day.

2 Manuscript message used with a variety of Christmas symbols. DESIGNER George Fejér.

3 The recipient co-operates by making the roundabout, which turns in an updraft. DESIGNER J. Beresford-Evans.

4 A photographic film, on a spool, is unrolled to show the message. DESIGNER Peter Hatch.

5 An unusual and most appropriate use of star and snowflake symbols. DESIGNER Sheila Stratton.

6 Christmas is a time for relaxation when such madness is possible. DESIGNER Misha Black.



Warnings against
too merry a
Christmas



Misha Black
3, Robert St
adolph 402

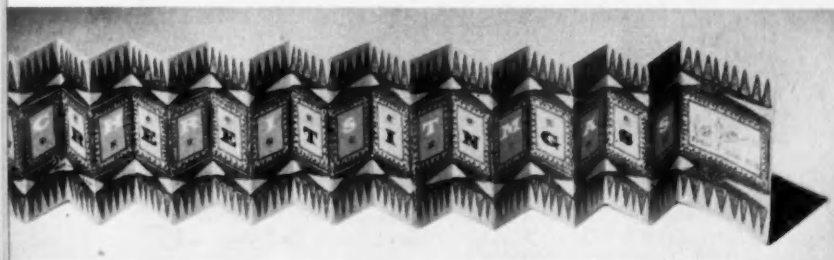


Personal Cards *continued*

7 The self advertisement of 'antick sepulture' has been caricatured to make a personal family message. DESIGNER Alice Woudhuysen.

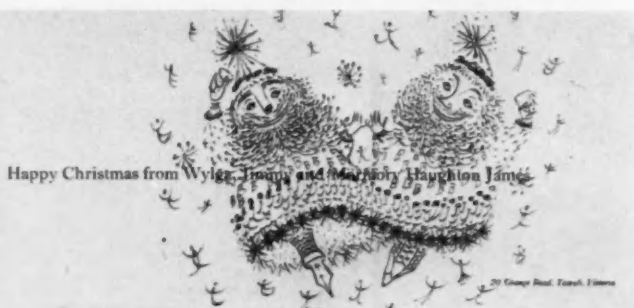
8 Folded flat for postage, this card pulls open like the cracker that is its decorative origin. DESIGNERS Peter J. Dixon and G. T. Knipe.

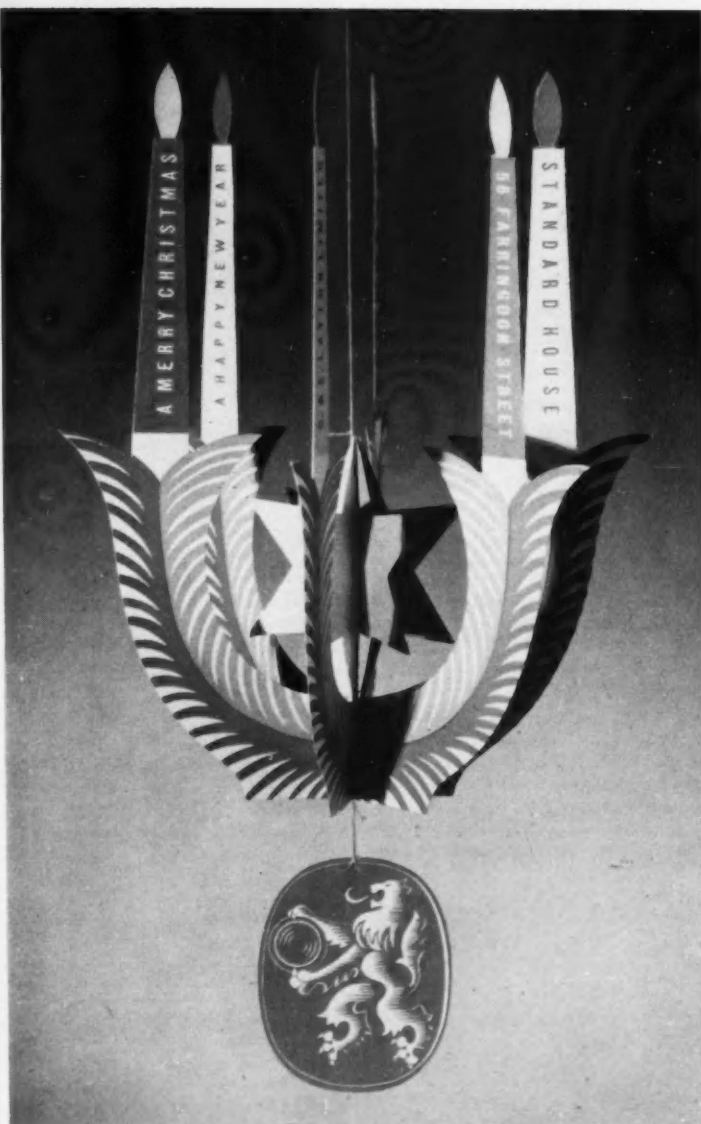
9 Curious transport - messages by balloon - a family portrait group - all the well known elements are here. DESIGNER David Carter.



10 The three dimensional card has a special charm when it is very simple. This is almost a model toboggan with the decorative elements from Santa's sleigh. DESIGNER W. R. Szomanski.

11 Festivity needs to be as spontaneous as this drawing, which might have been made in the midst of a party. DESIGNER Douglas Annand.





Business Cards

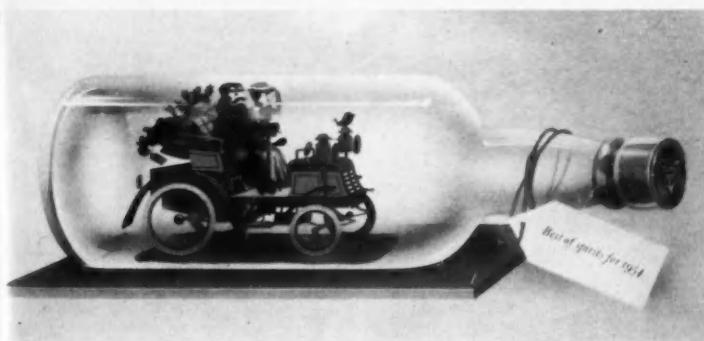
Business houses and professional people may use Christmas cards to greet very close friends or more distant contacts.

The nature of the business must be subtly presented and subservient to the Christmas part, or the personal element is lost. Success may be measured by the extent to which any symbolism representing the firm is made to form a real part of the design. These symbols should be so integrated that nothing else could be used without a total redesign. The card should be seen as a greeting from a composite personality, even though advertising forms a high proportion of the content.

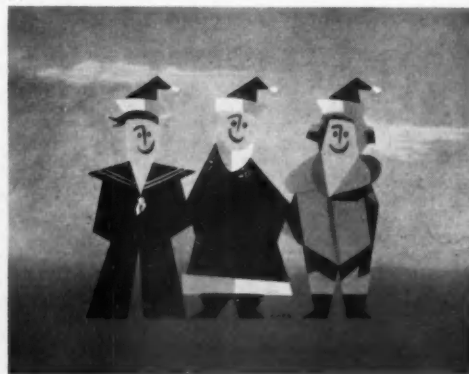
12 Much of the value of a card lies in its purely decorative quality, as distinct from its message or subject. This one would certainly be hung by itself, where it could easily be seen.
DESIGNER Cecil Meyer for C. & E. Layton Ltd.

13 The business of a firm and its products are combined so skillfully with the message and illustration that they are inseparable.
DESIGNER London Press Exchange Ltd for National Benzole Co Ltd.

14 Two of the figures symbolise the firm's interests, and the three of them suggest the three wise men. DESIGNER 'Karo' for Decca Navigator Co Ltd.



Design: Number 96



15



15 The tinsel star succeeds because of its boldness in this card for the Italian firm, Arteluce.

16 A fantastic staircase and Santa-porters are used to introduce the firm's products. DESIGNER David Fowler for D. Meredew Ltd.

16



Stationer's Cards

Family cards and those sent out by businesses have the advantage of being able to use their own special idioms which make them personal. However, although they may be interesting or significant as pointers for future deployment of the Christmas card, they form a minute fraction of the total output. In Great Britain the commercial producers turn over about 600 million cards a year, of which barely two per cent are reasonably well designed. These less personal cards bought at a

stationer's have a harder job to do, for they must be produced in quantity to meet the needs of a wide public, yet they are often chosen with a single person in mind. The bulk of the designs are manufactured in studios and their quality is probably conditioned more by the taste of the trade buyer than that of the general public. Yet from the work of one or two producers it is clear that excellent design and quality can be produced cheaply. The stationer's cards which readers of DESIGN received and liked included the whole gamut of

price range, motif and treatment, but the same few producers' names occurred again and again – most of the cards having the common factor of being credited to free-lance designers. In choosing a stationer's card everyone has his opportunity of selecting and assessing design within certain conventions, but the discerning manufacturer has far less difficulty in catering for a design conscious public than for those who have been fed, year after year, with sweet corn and glutinous sentimentality.

17



18

17 A medium priced card that could be sent to almost anyone. This kind of humour can transcend orthodoxy of sentiment. DESIGNER André François for the Gordon Fraser Gallery.

18 Small and cheap cards like this are at the highest level of the commercial market, the bulk of which only provides sentimentality. DESIGNER F. Finn for the Gordon Fraser Gallery.



20

19 A decorative blend of sophistication and simple drawing. DESIGNER Enrico Arno for Stahl Cards.

20 The three kings make a good subject because of the links with religion and folklore. DESIGNER Judith Francis for the Piccadilly Gallery.

21 There is a range of these fantasies which succeed in being generalised and festive. DESIGNER Franciszka Themerson for The Gaberbocchus Press.

22 'Festive times in many lands' is the subject of a series of cards published by the United Nations Children's Fund. DESIGNER Joseph Low.

23 A fantasy that is acceptable at Christmas time. DESIGNER K. J. Bredon for the Ward Gallery.

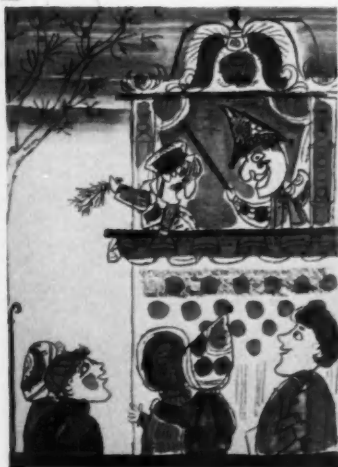
24 The Christmas hearth, complete with a portentous advent. DESIGNERS Negus and Harland for Saward & Co (London) Ltd.

19

21



22



23



24



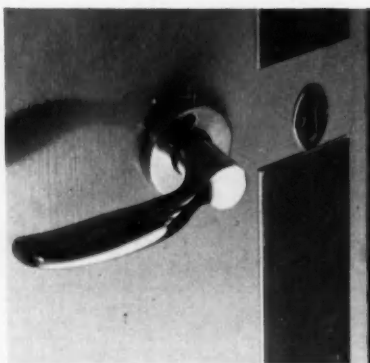
Design: Number 96

33

A selection of items recently accepted for inclusion in 'Design Review', the CoID's photographic and sample record of current well designed British goods. 'Design Review' forms an essential part of The Design Centre, 28 Haymarket, SW1, which is open on weekdays from 9.30 am - 5.30 pm.

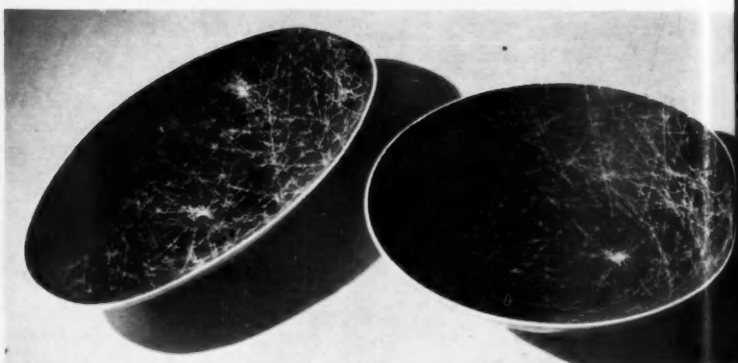
Review of current design

All retail prices quoted are approximate and include purchase tax where applicable



1

1 Attention has been paid both to appearance and function in the design of this lever door handle; its comfort in use results from the flat upper surface which spreads the pressure over the palm of the hand. Made of aluminium with a satin anodised finish. MAKER James Gibbons Ltd. £1 per set.



2

3

2 The freely drawn sgraffito pattern on these salad bowls gives an informal texture in key with current trends in wallpapers, fabrics and carpets. They are made of bone china and are available in various colours. DESIGNER David Queensberry. MAKER Crown Staffordshire China Co Ltd. £2 10s each.



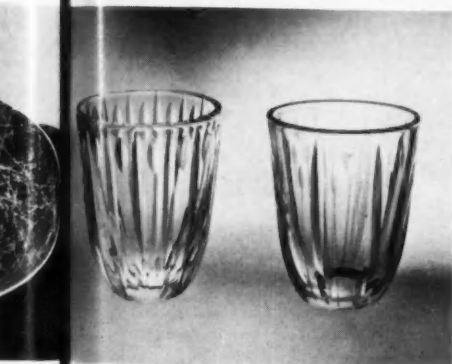
3 This chair has been designed so that it can easily be packed for export - the metal legs unscrew and the shells can then be stacked together. It has a welded steel frame with plastic foam cushioning on 'Pirelli' webbing. DESIGNER Ernest Race. MAKER Ernest Race Ltd. £28 12s.



4

4 The simplicity of the design of this sideboard emphasizes the texture of the walnut and mahogany veneers. Attention to detail, such as the sloping surface of the drawers and the bevelled frame contributes a sense of lightness. DESIGNER John J. Herbert. MAKER A. Younger Ltd. £24 14s 11d.

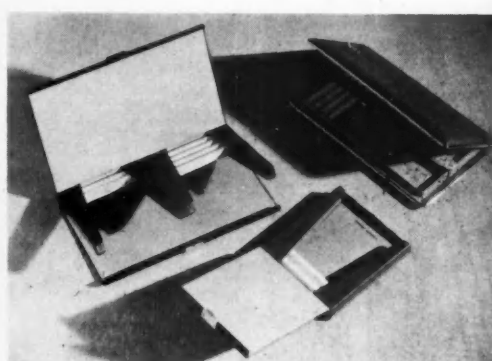
5 These crystal vases have been cut so that the pattern seems to grow out of and express the shapes rather than oppose them in the manner common to much ornamental cut crystal. DESIGNER Geoffrey P. Baxter. MAKER James Powell & Sons (Whitefriars) Ltd. £1 5s each.



5



6



7

6 The 'Easy' mixing bowl is American designed and made of polystyrene. The difficulty of gripping the bowl is solved for left handed and right handed users alike. MAKER V. & E. Plastics Ltd. 5s 11d.

7 Precise workmanship contributes to the fine quality of these three cigarette cases. The models on the right are covered with pigskin and that on the left with black crocodile. MAKER Asprey and Co Ltd. £24 12s (left); £9 4s 6d (centre); £5 17s (right).

8 The uncluttered appearance of this gas water heater for sinks and washbasins results largely from the use of the 'Regulo' control which eliminates the need for levers and handles. The capacity is 1½ gallons and the contents are heated in about 10 minutes, with a rapid reheating rate. Finished in white or cream vitreous enamel. MAKER Radiation Ltd. £16 10s 9d without fixing.



8



The showroom has been designed by Basil Spence & Partners as a shell to house the varied exhibitions that will be held there. For the current exhibition the walls and ceilings are black, while the display panels and secondary ceilings have been painted various shades of green, blue and pink. At the end of January the colour scheme and décor will change for 'Exterior and Interior Lighting', the next exhibition.

Showroom *for lighting equipment*



The reception area is the only part of the showroom that will not change. It has a metal tray acoustic ceiling and the wallpaper is by John Line & Sons Ltd; the furniture is Danish, and the information desk is in sycamore with a sponge rubber facing covered with 'Lionide'.

THIS SHOWROOM is attached to the AEI Lamp and Lighting Co's new regional headquarters in Glasgow. It has been designed so that lamp and lighting exhibitions can be held there as well as individual displays of lighting equipment.

Windows run down two sides of the room, which covers approximately 1600 sq ft of floor space, and special window displays are lit by fluorescent lamps above plastic louvres. The walls and ceilings have been faced with a thin layer of plywood painted matt black to emphasize the gay colours of the display panels and light fittings, and 'Mazda Invertrunking' runs across the showroom so that the lighting schemes are flexible and easily changed.

'Systems of Lighting', the first exhibition to be shown there, is based on the 'Lighting and the Architect' exhibition held in AEI Lamp and Lighting Co's London showroom last year, and has been redesigned and adapted for the Glasgow branch by Robert Wetmore. It shows how lighting fittings and special equipment have been designed to combine with materials and products used in the building industry today, and demonstrates lighting systems that can be integrated within the fabric of a building. This showroom was designed by Basil Spence & Partners; the architect in charge was J. Hardie-Glover, and the contractor John Cochrane & Co Ltd. The company now has showrooms in London, Birmingham and Glasgow.

new designs for

STREET FURNITURE

GEORGE WILLIAMS *Secretary CoID Street Furniture Panel*

Since our last survey of street furniture (DESIGN April pages 27-35) there have been several new developments which indicate a growing awareness of the problems of design in this field. A few of these are described in the following miscellany, which includes a student's design for a telephone kiosk, a project for a new Shell service sign, a bus shelter, a parking meter and some of the latest developments in street and amenity lighting.

Telephone kiosk

Students from the department of industrial design (engineering) at the Royal College of Art have been encouraged to treat various items of street furniture as suitable objects for study and development. The need for improvement in the design of telephone kiosks, for example, has been carefully considered. This illustration shows a telephone box for the street, designed by Neville Morgan. The door has been designed to swing open and slide back so that the kiosk is easy to enter and leave; inside the positions of the controls have been rearranged and there is a wide shelf for consulting directories. Because of its square shape and flush sides the kiosk can easily be combined into groups or rows of units, by bolting the main frames together with a weatherproof sealing strip in channels provided round the edges, and using a sound-insulating material which need not be weatherproof for the internal walls. The kiosk is ventilated by slots which cannot easily become blocked.



Street and amenity lanterns

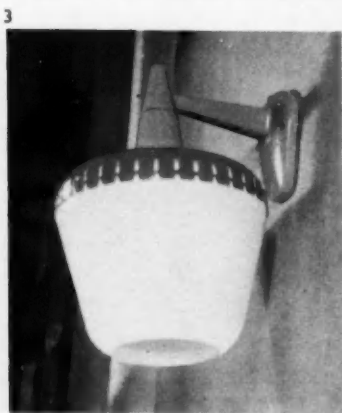
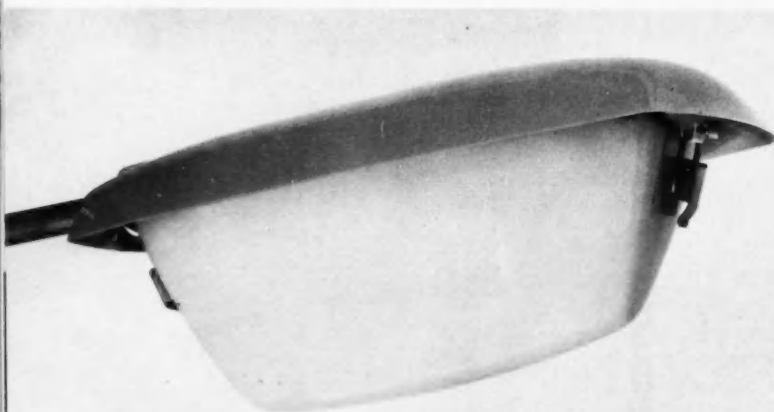
It is an interesting fact that the post top lantern of 50 years ago has returned to favour with many local authorities, both for group B street lighting and for some main roads. It is particularly valuable when sited near the edge of the pavement, where an overhanging bracket is not permissible, and in forecourts of buildings and places of architectural interest where the lighting should be unobtrusive, in keeping with its surroundings. There is also a growing interest in wall mounted fittings for places where column mounting is undesirable or inappropriate.

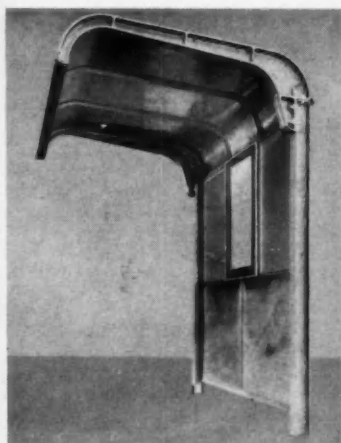
1 The 'Beta III' group B sodium lantern. The canopy and diffuser bowl are in 'Perspex', and the light is controlled by the projected area. This lantern is equally suitable for pole or

wall mounting and a particular feature of the design is that all the control gear is enclosed within the bowl. **DESIGNER** R. Stevens. **MAKER** Thorn Electrical Industries Ltd.

2 There has long been a need for a tapering lighting column which should fulfil. Since no painting is required, maintenance costs can be kept to a minimum. Robust yet extremely light, it is possible for one man to erect it. **MAKER** Metal Developments Ltd.

3, 4, 5 These three new wall mounted lanterns are derived from the present day approach to the problems of domestic lighting, but they should fulfil the need for attractive fittings for building exteriors. The 'Beaufort', **5**, is a multi-purpose fitting, and although it is shown here as a wall mounted lantern, it meets all the requirements of post top column mounting for group Broads. **MAKER** Falk Stadelmann & Co Ltd.





6

Bus shelters

When this design, 6, was submitted to the CoID at the beginning of 1955, the panel, whilst complimenting the firm on the neatness of the vertical panels and the glazing, was severely critical of the cantilevered canopy. It was felt that the heavy radii, the depth of the forward 'skirt' and the method of



7

attachment to the vertical joists, were at variance with the light weight of the aluminium alloy canopy castings and with the present day trends in street furniture design.

Although considerable expense had been involved in tooling up for the original design, the firm readily

accepted the CoID's criticisms and, following a number of meetings between the author and the company's executives, went to a great deal of trouble to develop this design, 7, which was recently approved by the panel. DESIGNERS J. S. Williams and D. K. McGowan for Henry Hope & Sons Ltd.

Parking meter

The Red Ball Parking Meter Company was one of the first firms to consult the CoID about the design of its standard meter, when the Ministry of Transport and Civil Aviation advised manufacturers to produce meters of pleasing appearance, as well as to adhere to given technical specifications. On the CoID's recommendation, J. Beresford-Evans was appointed consultant designer. The size and relative positions of all the main features – the coin slot operating handle, the red ball denoting expiration of the time limit and the internal mechanism – had to remain unchanged. The illustration of the redesigned version, 9, is taken from Mr Beresford-Evans' full size prototype model. The clean lines of the casing, the compact dial, and the remodelling of the handle, all contribute to a pleasing general appearance.

8



9



A new sign for Shell-Mex & B P Ltd

Shell-Mex & B P Ltd has always supported established standards of good design and the company's consistent policy of employing eminent designers has proved to be successful.

A new marketing plan for Shell and B P petrols has now brought the need for separate Shell and B P signs. In America Shell retained Raymond Loewy to design a new sign for the USA – this was not subsequently used – and the British organisation asked the CoID to assist in finding the right solution. The CoID's Street Furniture Panel examined various proposals put forward by the company but found that for a variety of reasons the signs were unacceptable for this country. The panel felt, for instance, that the Loewy version, 11, whilst basically good, would be too large in scale for the smaller

British town and too obtrusive in our countryside. The tubular structure of the old Shell sign and one at present widely used on the Continent were considered inappropriate for the modern service station. The company was advised to appoint a consultant designer and at the CoID's suggestion Jack Howe was subsequently asked to work on an entirely new sign.

Mr Howe felt that no change should be made to the existing Shell symbol because of its popularity and established goodwill value. The problem was to display the symbol effectively both by day and by night, and he decided that the sign would be more immediately perceptible if it were placed in a frame of well defined shape mounted upon a tapered aluminium or 'Fibreglass' pole, 12. He felt it essential that the symbol should be seen on a translucent panel if it were not to lose its emphasis against the background which might vary from the strong contrast of a building to a

similarity or confusion of tone and colour. He therefore decided that a carefully thought out design in two dimensions would be preferable.

The company, whilst appreciating the basic principles of Mr Howe's design, was in general opposed to the idea of discarding the fully moulded plastic shell used elsewhere. After many weeks of research and testing of scale and full size models by day and night, it is inclined to favour a moulded shell suspended within the frame of Mr Howe's original design, 13. The problems of internally illuminating the symbol and of servicing the sign, for which the designer had originally allowed for, the company believes, have been solved. It is understood, however, that the company has not entirely forsaken the idea of mounting the moulded shell against a plain surface. This will effectively avoid any interruption by the background and serve to throw the symbol into prominence, 15.

10



10 The existing British Shell/BP garage sign. A change of marketing plan dictated that a new sign should be produced for each product. At the CoID's suggestion the Shell company appointed Jack Howe to work on a new design.

11 Some of the proposals considered by the CoID's Street Furniture Panel. The Loewy design (left and right) was thought to be basically good, the coloured background serving to throw the symbol into prominence. The panel however found the scale of the sign rather large for this country, and also recommended that it should be centrally mounted on the pole. The panel considered the standard American pedestal sign (centre) gross and ugly, entirely out of keeping and scale with good service station design.

11





13



12 A scale model of the new Shell sign designed by Jack Howe. The two dimensional symbol is mounted on translucent panels in a cast aluminium frame. Internal lighting is by fluorescent lamps easily serviced. The pole was intended to be in aluminium alloy or 'Fibreglass.'

13 The Shell company prefers the standard moulded plastic symbol mounted free within the new frame. The yellow is considerably lighter than the deep ochre at present favoured by the company.



14 The open sign loses something of its clarity and directness when seen at a distance against a muddled background.

15 The design as it would appear if the Street Furniture Panel's recommendation were adopted by the Shell company.



DESIGN AND STRESS ANALYSIS 4

This series of articles shows how the product designer can take advantage of new methods to give him a greater insight into structural aspects. Previous articles appeared in DESIGN for June, July and September.

Photo-elasticity *for the product designer*

L. BRUCE ARCHER
*Lecturer in industrial design
Central School of Arts and Crafts*

BOHDAN J. ZACZEK
*Lecturer in charge of research
Battersea Polytechnic*

The illustrations on pages 44-46 are taken from an experiment intended to test the practicability of a simplified technique of photo-elastic stress analysis developed by Mr Archer and Dr Zaczek. The experiment was carried out by Christopher Jackson, a fourth-year student in the school of industrial design, L.C.C. Central School of Arts and Crafts. It is believed that this is the first recorded example of the application of such advanced techniques to ordinary product design.

THE ART OF PRODUCT DESIGNING is largely the art of compromise. The product designer is required to strike a delicate balance between the always competing and sometimes opposing demands of five main aspects of design:

functional design, which is the delineation of the purpose that the product has to fulfil;

mechanical design, which is the devising of means for performing that function;

structural design, which is the proportioning of components to withstand the loads to be imposed upon them in service;

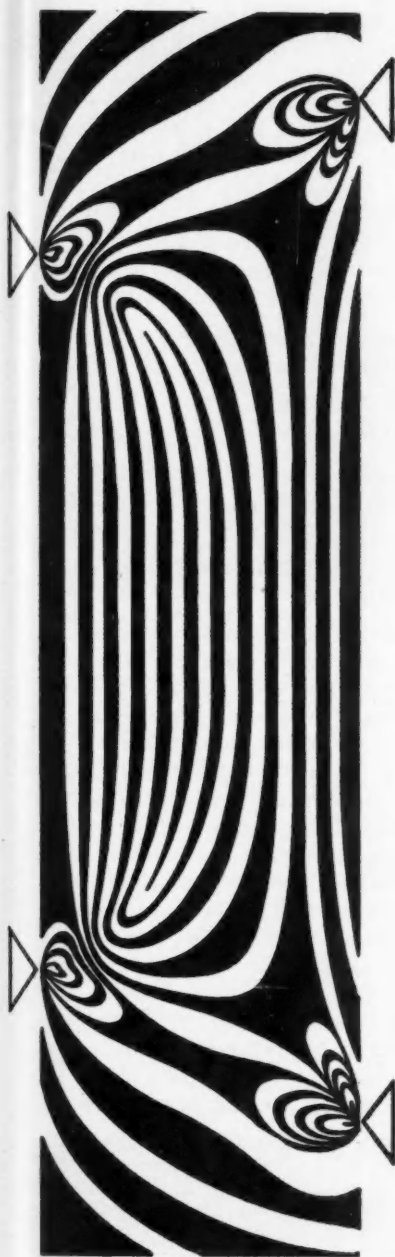
production design, which is the adaptation of components to economical manufacture;

visual design, which is the incorporation of aesthetic, ergonomic and other factors calculated to make the product more attractive to prospective consumers.

These five aspects of design cannot be thought of as separate considerations nor can they be dealt with in a given chronological order. A good product designer should be as incapable of setting out an ugly shape as he is of suggesting an uneconomical manufacturing process, at any stage in a design. The weight which the designer gives to each of these simultaneous considerations, however, has a profound influence on the nature of the final product.

At the present time, there is a marked tendency for production considerations to assume a dominating position over all the other aspects of industrial design. This is probably because the production engineer has made such tremendous progress in the improvement of his own particular art that he can support with a wealth of technological argument each of the many demands which he makes upon the designer. In reply to these demands the product designer can produce very little material evidence with which to defend the counter-claims of other design considerations. Sometimes even the mechanical and structural needs of a product are subordinated to the adoption of cheap and easy production processes to such an extent that its useful life in everyday service is seriously curtailed. Sheet metal products such as dust pans and shovels are frequent offenders in this category.

There are two methods by which the product designer may approach



The photo-elastic technique makes use of the fact that when polarised light is passed through transparent material which is subjected to stresses, the light emerges in a pattern of spectra which bears a direct relationship to the pattern of stresses in the material.

the structural aspect of designing. He may either take a basic layout as required for functional and mechanical reasons and work out the structurally ideal cross-sections for the components, adding as much (structurally surplus) material as necessary to satisfy aesthetic and practical requirements; or he may prepare a proposed design by intuitive methods and subsequently analyse it and modify it to eliminate weaknesses. The first method might be described as the mathematician's approach, which can be slow and costly though it is probably the safer. The second can be compared with nature's way with design – random mutation and subsequent selection – which is quicker and more productive of revolutionary results, though it can also produce more failures. Whichever method he adopts, the product designer in possession of the structural facts is in a much better position to evaluate the relative merits of opposing demands, and to judge the probable effects of any variations in form which might come to mind.

In the design of critical products such as aircraft structures, high-speed engines, high-pressure equipment, etc, the value of the maximum stress in each component has to be calculated. For everyday products such as we are considering here – washing machines, wringers, pressure cookers, sewing machines, and all manner of domestic and office appliances – the only need is for a picture of the *distribution* of strength and weakness. From such an analysis it is easy to see where proportions may be reduced and where they must be increased. The photo-elastic method of stress analysis, from which all calculation can be eliminated, is therefore a valuable new instrument for the product designer.

Photo-elastic method of stress analysis

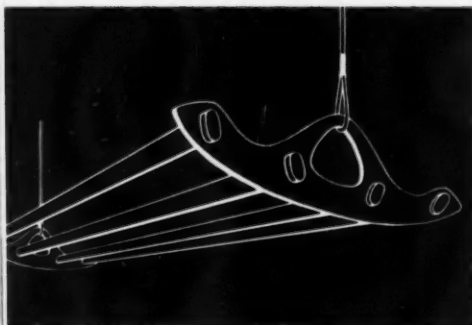
The photo-elastic technique takes advantage of a phenomenon which occurs when polarised light is passed through transparent material. When the transparent material is put under load it has the peculiar effect of modifying the polarised light in direct proportion to the stress which is present in the area through which it passes. The net effect is that the light emerges in zebra-like patterns of rainbow colours. These chromatic bands are known as 'fringes'. All transparent materials betray this photo-elastic effect in varying degrees. Glass and celluloid were used in the early days of photo-elastic experiment, but in recent years more sensitive materials have been developed. Probably the best is the Bakelite company's BT 61893, but this is rather expensive, costing about £5 per pound. Catalin's 800, Ashdown's CR 39, and Scott Bader's 'Marco' resin are also very good, and less expensive. Celluloid, although less sensitive than the newer materials, is still very useful where great precision in measurement is not essential. It is often used for building composite structures since pieces of celluloid can be stuck together easily by means of acetone.

Significance of fringes

Photo-elastic fringes resemble contour lines on a map. All points on a given fringe are subject to the same stress, just as all points on a given contour are at the same height above sea level. Similarly, in tracing a line across a series of fringes, the stress can be seen to be increasing or decreasing by equal increments. The closeness of the fringes indicates the steepness of the stress gradient. The number of fringes occurring

Photo-elasticity

Photo-elastic models are usually cut from flat sheets of special transparent material, and represent sections through the product. This is a model of the end-frame of a proposed clothes hoist.



An impression of the design for a clothes hoist which resulted from the photo-elastic experiments. The construction materials are assumed to be cast aluminium and hardwood.

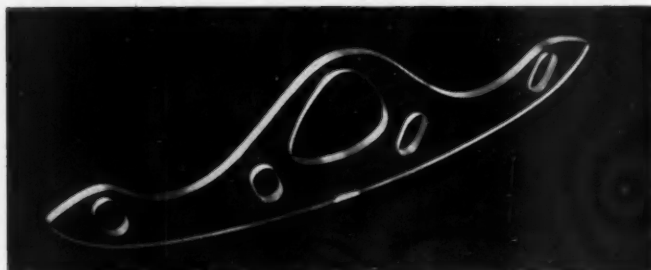
The photo-elastic material can be cut quite easily with a fret-saw, later to be finished with smooth files. The material is rather brittle and needs to be supported close to the cut. A fine toothed blade and gentle sawing is required. After filing to perfectly smooth contours, the model is polished until all irregularities and scratches are removed.

between any two points reveals the difference in stress between them. Counting fringes is as easy as counting contours.

If the piece of transparent material is cut to the shape of a product, and if the load is applied in a manner similar to the way in which the product would be loaded in service, then the pattern of fringes would reveal at once the location of weak points and areas of strength.

Preparing photo-elastic models

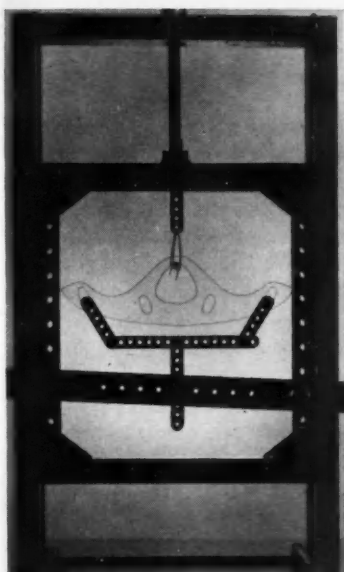
Photo-elastic models are usually cut from flat sheets of transparent material and therefore represent sections through the products. Three-dimensional models are also used under certain circumstances but



they require a more elaborate technique. Conveniently enough, the stress distribution as seen in the model will be exactly similar to that in the same plane of the product itself, even though the product may be made of, say, steel. The thickness of the transparent model does not affect the stress diagram, provided of course that the thickness is the same throughout the one model. Two models, alike in every respect except for having been cut from sheets of different thickness, will display identical fringes, and both will demonstrate the exact distribution of stresses within a similar product made in metal. The model will, of course, distort under load more than would the metal product and the thickness of the model must be sufficient to maintain reasonable stiffness. There are optical advantages in keeping the model as thin as possible, however. The model can be made to a reduced or an increased scale if the natural size of the product is inconvenient.

Photo-elastic materials can be obtained in rough or polished sheets from which models may be cut by almost any light machining process. Fret-sawing followed by hand filing are ideal methods, having the advantage of avoiding the introduction of unwanted initial stresses,





The model is supported in a rigid frame and loads are applied at the appropriate points by means of dead-weights and levers. Here the model is supported at a single suspension point and two equal loads are applied to imitate the forces which would be experienced by the clothes hoist if it were carrying a heavy blanket draped across it.

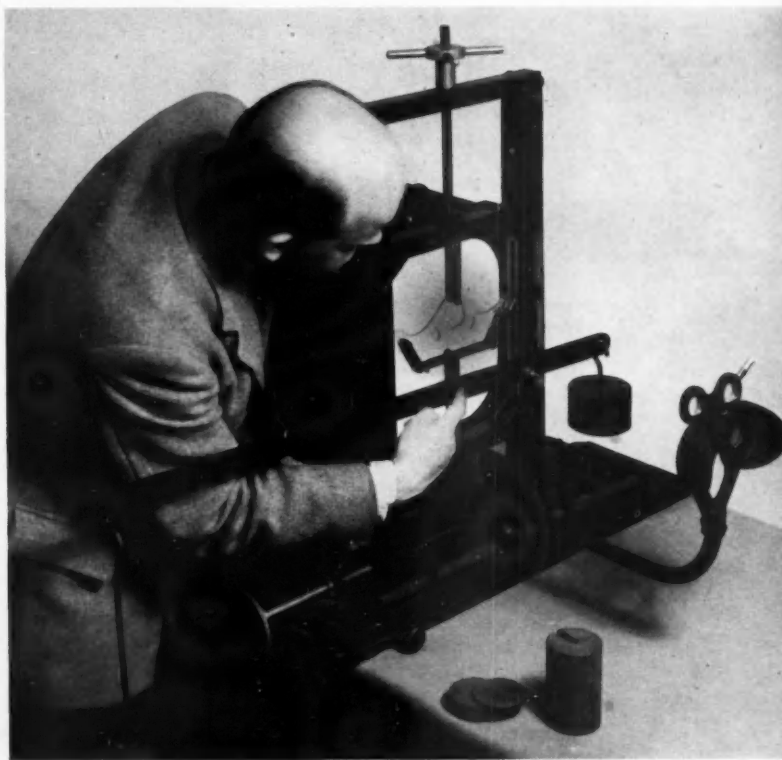
such as those which can arise from more drastic machining methods. The edges and surfaces are then polished until all irregularities and scratches disappear.

Testing photo-elastic models

The test loads are best applied to models by means of dead-weights. It is important that the positions and directions of the load forces should be correctly imitated. Most experimenters use standard loading frames which are drilled all round with holes to which the model may be attached in any desired orientation and apply loads by means of weights and levers. Care has to be taken that unwanted side loads do not occur due to the twisting of the model or the loading frame.

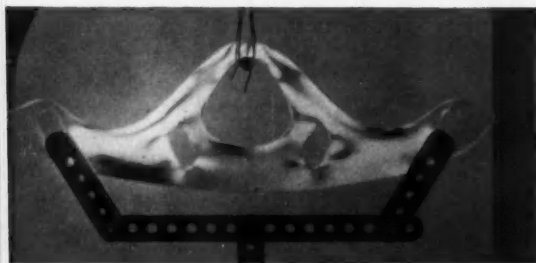
Analysis is carried out by placing the loaded model between a source of polarised light and a polarising filter known as an analyser. The chromatic fringes can be seen in the model itself by looking at it through the analyser. However, it is often more convenient to study their image cast on a screen placed at the eyepiece. The outline of the model and the points of maximum and minimum stress can be marked on the screen which is often covered with a detachable sheet of squared paper for this purpose. Alternatively a piece of photographic paper may be attached to the screen and a photograph taken of the fringes.

It is usual to test the model under a series of increasing or decreasing loads. As the load is varied the fringes can be seen to travel in waves across the model. In order to obtain greater contrast, a sodium or other mono-chromatic light source is frequently used. The fringes are

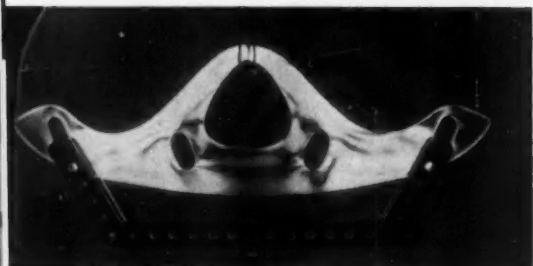


The model is placed in front of a light source which is screened by a ground-glass diffuser and a polarising filter. On the other side of the model is an eye-piece carrying the analyser, which is simply a second polarising filter.

Photo-elasticity



ABOVE The photo-elastic model, when viewed through the analyser, can be seen to be covered with bands of rainbow coloured light. These are known as 'fringes' and indicate the distribution of stress within the model. The fringes running parallel with the top edges indicate that the proposed shape has no weaknesses there. At the point of suspension, however, the crowding fringes betray a stress concentration and suggest that the cross-section at this point should be much wider. There should also be a little less material at the bottom of the dip in the upper edge of each arm.



Under increasing load a fourth point of weakness is revealed in the centre of the bottom span.

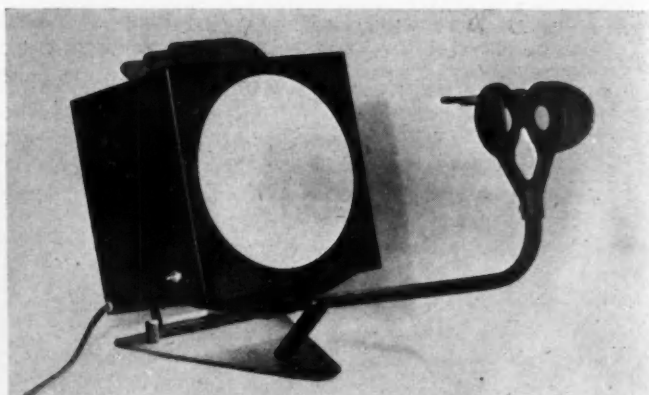
then simplified into sharp, dark and bright bands instead of spectra of merging rainbow colours.

Interpretation of results

With experience, great skill can be acquired in the interpretation of photo-elastic fringe patterns. Generally speaking, fringes which are closely packed reveal severe changes in stress. The best designs, from the structural point of view, are those in which the fringes are few and in which the least possible number of fringes terminate at the edges of the model.

Much painstaking research has been conducted into the evolution of systems of interpretation, and formulae have been worked out for the conversion of stress pattern measurements into actual load figures as they would occur in the product itself.

Most of this work has been concerned with the analysis and measurement of stresses in important structures such as aircraft and high-speed engines. Quantitative results have been considered to be of first importance and the techniques developed have involved fairly advanced mathematical operations. However in the simplified technique described in this article the need for mathematics is reduced almost to vanishing point.



This photo-elastic viewer was originally developed for the detection of flaws in glassware. It costs £62 5s. However, it could be adapted for product design analysis and might sell for as little as £35. This would comprise a lamphouse with 300 watt lighting, diffusing screen, polarising screen and separate analysing screen. MAKER H. S. B. Meakin Ltd.

Photo-elastic apparatus now in use

The photo-elastic apparatus possessed by most of the universities and colleges of advanced technology is of a rather elaborate kind. For the design of domestic consumer products by the proposed new techniques a simple polariscope might be constructed for as little as £15 to £20. The first photo-elastic laboratory to be set up for the purpose of designing ordinary consumer products is at the L.C.C. Central School of Arts and Crafts, where it is playing a part in a programme of research into the application of advanced methods to the better design of simple products. It has already been shown that for the expenditure of a few shillings on material and two days' work on model making and analysis, a more complete answer to a design problem can be obtained than would have been possible by traditional methods in as many weeks.

MAURICE de
SAUSMAREZ

Head of Department of Fine Art,
University of Leeds

There is no doubt that the "clinical neutrality" of university design in recent years is now giving way to a more positive approach. There are projects for expansion in Edinburgh, Liverpool and Sheffield universities; Sir Hugh and Lady Casson have recently completed the decoration of new students' quarters at Nottingham University, and plans have been prepared by Sir Hugh Casson and Neville Conder for lecture rooms and faculty buildings in Cambridge, where, in addition, there is an active design society. In this article, which formed part of a symposium on 'The Arts and the University' in the February issue of 'Universities Quarterly', Maurice de Sausmarez urges that university authorities should also encourage higher standards of interior design and equipment in existing buildings.*

Better looking universities

IT IS FREQUENTLY SAID that in answering the demands of the times the universities must still 'keep their standards' and stand for the right things. This, when it is discussed, usually centres round intellectual standards and one would hardly expect it to be otherwise. But there is a feeling that this injunction to preserve standards also applies to the peripheral questions of accommodation, physical well-being and general environment. In the past the standards which were discussed in these fields appear to have stopped at efficiency, comfort and utility; consideration of aesthetic standards has seldom featured strongly. Indeed, in the case of the modern universities it is still not so much a question of 'keeping the standard' but rather of establishing an aesthetic standard to keep.

The substitute tradition

It is clear that early in this century, in many cases, an attempt was made to manufacture a quick substitute for a long tradition by considerable play with leaded lights, heavy, dark, 'monastic' furniture, the silver-gilt mace, carved heraldic devices and the like. The challenge that they should be fully the universities of the modern world was never met, at least not in the creation of a truly contemporary environment for working and living. To take but one example: there is scarcely one of the younger universities that can look back at the general standard of its Calendar for 1935 in terms of typography, page arrangement, quality of printing and general design with any sense of pride. At a time when Eric Gill and Edward

Johnston had reintroduced clear, disciplined beauties into English typographical work, debased Gothic founts and the hack type-setting of the jobbing printer were considered right for the new universities. Can it be said that the position is greatly changed today? Certainly the leaded lights and the pseudo-monastic furniture have gone, but has the uncritical outlook that made them possible? No one expects the universities to embark on a wild chase of fashionable design idioms. The great Oxford and Cambridge presses show that a sound tradition of design and impeccable craftsmanship can preserve a balance between a rigid conservatism and an innovating experiment. The fine letter-forms used throughout Senate House, London, remain in the mind the more strongly by contrast with the commercial sign-writer's sans-serif in other university centres.

High standards in schools

The adverse critics of educational standards in the schools of this country today must recognise one field at least where rapid advance can be recorded. At no other time has so much thought been given to the education of the eye, admittedly not so much by systematic instruction as by indirect methods. It would be unfair for the philistines to attribute any drop in intellectual standards to this very welcome advance. It is an introduction to art as an integral part of living, although it would be difficult to assess its effectiveness in sharpening the discriminative powers of the pupils since so little is done to develop a critical sense by direct

* Reprinted by kind permission of the editor, Boris Ford. 'Universities Quarterly' is published by the Turnstile Press Ltd, 78 6d.

Better looking universities

instruction. In 1939 when the High School for Girls at Richmond, Yorkshire, was built it was, to most people, a remarkable and daring innovation. Today school building falling below this high standard of design is seldom found. The frank use of new materials, consideration of space relationships and emphasis, the vitalizing and integrating value of colour are everywhere respected. Not a few local authorities have their permanent art advisers whose influence spreads far beyond the province of art education and has begun to affect every aspect of design in the schools, from school furniture to typography.

A positive approach

The transition from an environment in which these things had mattered to the, until very recently, clinical neutrality of many university precincts was in this respect a sadly retrogressive step. The argument that it was effectively countered by the new intellectual vitality that awaited the newcomer to the university was hard to sustain. Genius perhaps needs few external props, but that humbler talent which largely fills universities today will be the better for living and working in surroundings which refresh and revive its spirit. The modern civic universities, it is true, have inherited the buildings of a misguided nineteenth-century 'monastic' ideal; the earlier years of this century added grandiose pseudo-classicism and neo-Georgian, and between the wars a certain amount of cultural warehousing, but, whatever the legacy, the eye of an enterprising and skilled designer can transform it into a positive source of refreshment, if not inspiration. The many splendid new buildings that have been added since the war should not be allowed to deflect attention from the central problem of transforming the old which constitute a very large proportion of university property. The imaginative treatment that the contemporary architect is anxious to sustain throughout his building, inside and outside, has made many of the recent additions to university buildings object lessons in the integrating and vitalizing power of the designer's hand. The lesson has not always been fully assimilated; all aspects of university environment should benefit in a similar way.

It is still not unlikely that the new-

comer to some of our modern universities will make his enquiries at a porter's lodge that reminds him of a suburban railway booking-office. He will almost certainly walk through furlongs of cream painted surgical tunneling, passing on the way notice boards which present varying degrees of typographical and calligraphic distress. The interior of the lecture room, though clean and bright, continues the desperate monotony of academic cream. In every direction the contemporary ideal of efficient function has taken the lead. There is no doubt that the highly organized routine of life satisfies in itself some of the human need for order and reliability, but once these demands of efficiency have been met, many people have been content with the situation. The machine is running smoothly enough, why bring in this aesthetic distraction? A justification could be attempted on the grounds of even greater efficiency, or by the fear that those who live and work in surroundings depleted of distinctive personal character may gradually assume the attributes of the machine. But really it needs no 'high-falutin' justification; the pleasure, the increased refreshment of spirit that this consideration of environment contributes is sufficient. Today even the man of intelligence seems at times to need a reminder that art is an enrichment of life and living and not an enrichment of museums.

Academic environment

If the academic is sceptical of 'education' that trains the hand without training the mind, he must also be prepared to acknowledge the impoverishment that results from training the mind without 'educating' the senses, though divisions of this kind are admittedly false. There are of course the dangers of 'preciosity' and 'dilettantism' but these are symptoms of a highly sophisticated stage in development that is, in many cases, still in its early period. They are symptoms that are more likely to come from attempts at imposing, in cerebral fashion, ideas of taste and standards of culture than by concentrating on arranging the conditions in which a natural response and intuitive judgment are fostered. A lecture, whether it be on the appreciation of painting, architecture or industrial design, may do no more than go in at one ear/eye and out at the other unless it is followed up and confirmed by visual experience and some continuity

in methods of developing sensitivity and discrimination. University environment should help visually in this way.

Improving the situation

It would be quite untrue to say that no moves have been made to improve the position and that no one is concerned about it. Much has been done, but it becomes increasingly clear that the situation can only be satisfactorily resolved by consulting the artist-designer. Society is prepared to consult the specialist in the solution of almost every other problem, but hesitates in matters of aesthetic judgment. There is resistance to the intrusion of the specialist into fields where personal choice should operate. But a very different picture would have resulted from the operation of personal selection and judgment consistently applied; one would have been aware of the integrating factor of a personality giving a certain homogeneous character to an environment. But this has not often been the case in the recent past. Piecemeal development, accumulations of separate compromise decisions by committees, or limited decisions by a number of different individuals can only produce a neutral or visually unorganised situation. It is the growing recognition of the important contribution to be made to university life by the consultant designer that is in large measure responsible for the improvements that can everywhere be seen.

With the rapid expansion of many of the universities, the task of establishing an aesthetic standard or preserving an existing high standard will demand continual consultation on matters of design and it would seem that an even wider use will be made of the artist-designer. Unless he is tarred by the brush of nineteenth century romanticism, he is working as objectively as a structural engineer. He has a problem to solve and the solution of it need occasion no extravagant displays of temperament to disturb the clients for whom he works. If it is agreed that the universities have a responsibility, not for dictating standards of 'taste' but for providing the best material for the development of individual critical awareness and discrimination, then standards of design in every field are of importance.

It will not be surprising if, in a few years' time, the 'General Design Consultant' features in the list of the administrative staff of the majority of English universities.

Overseas Review

Germany

Trends in carpet squares

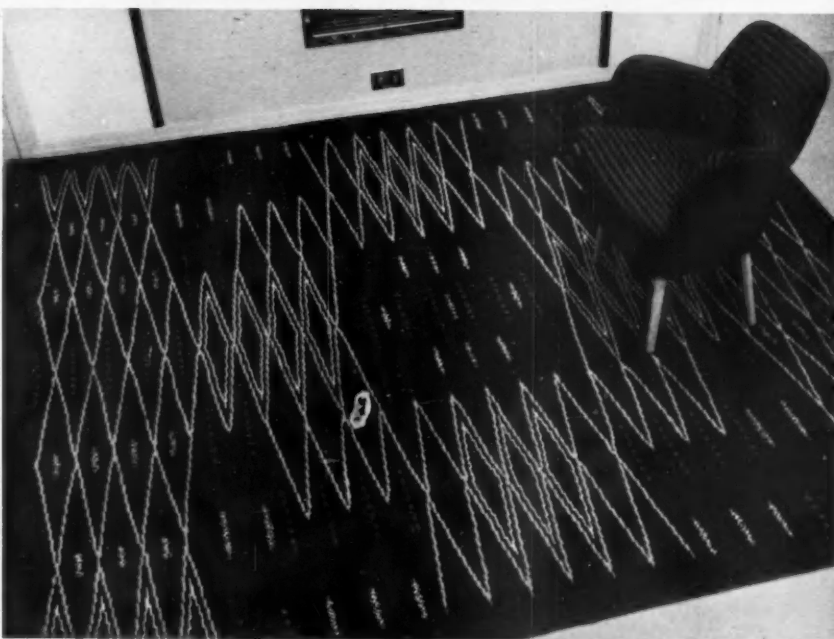
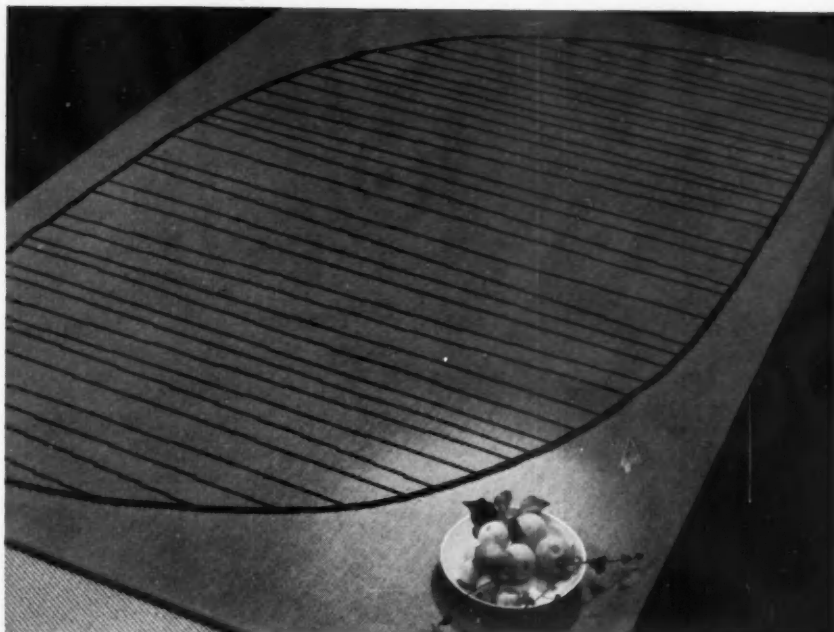
Design for the carpet square as an entity is certainly not new. Rather is it more firmly rooted in tradition than the idea of smaller scale patterns suited to fitted body carpet.

Large scale design in a modern way has, however, been rare and most of the initiative of the last few years seems to have come from Germany. The Continental keynote has been a cool, dramatic quality often with much distinction and originality, though in some cases the designs seem to have been conceived without consideration for the furniture which is to be placed upon them.

The British carpet industry has now turned to the modern large scale idea with great gusto and some of the designs being produced are startlingly bold in conception. This willingness to develop new and ambitious ideas must be welcomed, but the danger of following the less satisfactory aspects of the German designs must be appreciated. Already retailers are finding use for these designs as 'traffic stoppers', and much thought must be given to the development of this praiseworthy trend if it is to avoid degeneration into a passing gimmick.

1 A carpet by Herforder Teppichfabrik Huchzermeyer & Co in the austere manner of modern Continental squares. It is doubtful if such a large single motif would relate well to the furniture of an average sized living room.

2 This new 'Ramsey' square by Quayle Tranter Ltd combines the merit of a design planned for the area as a whole with a necessary livable quality which will prevent it from dating rapidly. DESIGNER N. Lowndes.



USA

Introducing films

Saul Bass, the American designer, whose unusual designs for film titles and credits have gained him a fan mail in the United States, has sent us this report on the work he has been producing recently. The growing awareness of the effect of a well designed film title is reflected in the interest which Saul Bass' work has aroused. Selections of his designs are illustrated here showing his use of both animation and live action shots to introduce the credits.

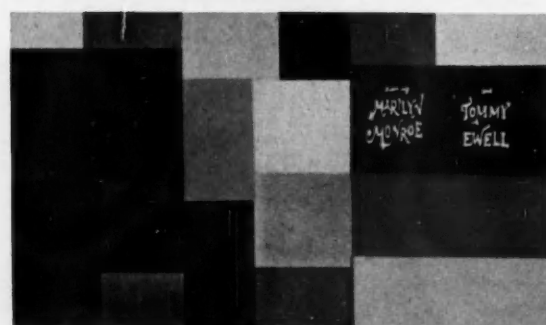
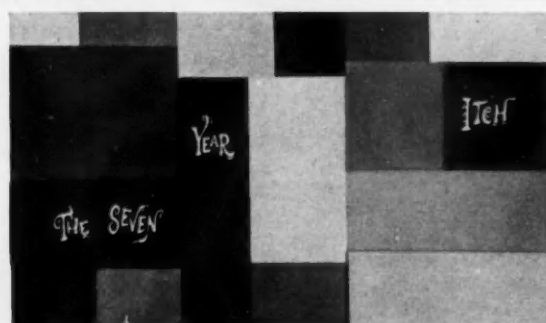
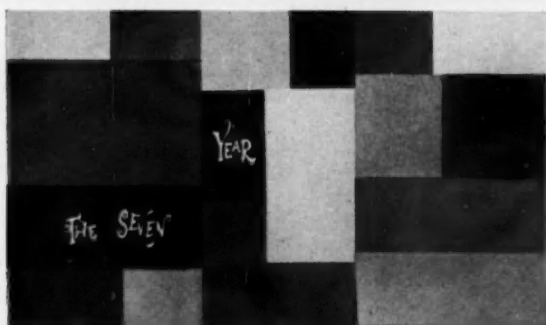
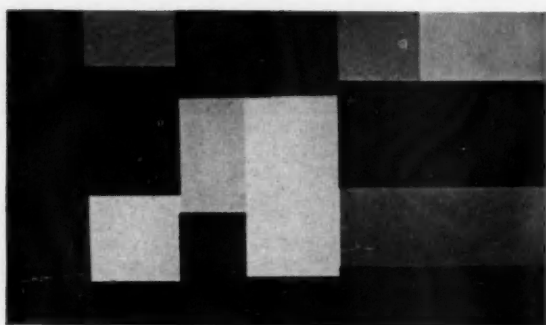
In spite of all efforts to control the situation; the list of credits on films grows larger each year. Yet it is generally recognised that the film going public is not interested in any of these, with the exception of the leading actors and actresses, and a few well known craftsmen.

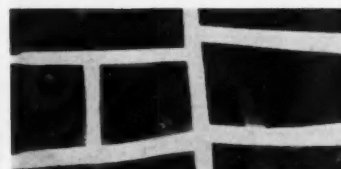
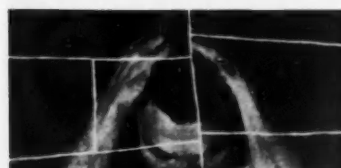
Since trade requirements demand these extensive credits, it seems that this usually rather dull interlude should be converted into a positive introduction to the film. Normally the running of the title is a period during which the patrons leave their seats for popcorn, make small talk with their neighbours, or simply explore their seat for long range comfort, and when the film itself begins there is usually an initial 'cold' period. I have approached the titles with the objective of making them sufficiently provocative and entertaining to force the theatre inhabitant to sit down and watch because something is really happening on the screen. It then may become possible to project a symbolic foretaste of what is to come, and to create a receptive atmosphere that will enable the film to begin on a higher level of audience rapport. SAUL BASS

◀ 'The Seven Year Itch'

Twentieth Century-Fox

The title starts on a black screen which is then filled haphazardly with coloured rectangles which either pop or slide into position. When filled, the panels flick open, reveal the credits, and close sharply in varying patterns and tempos. Amusing little incidents, such as the 'e' in 'Itch' scratching itself several times, enliven the proceedings. The title ends with the opening of a final panel from which the final credit pops out jack-in-the-box style.





'The Big Knife' United Artists

The title opens on a black screen showing the top of a man's head. As the camera pans down slightly one sees that he is holding his head with his hands. As he continues to express, by hand and head movement, great inner torment, the titles appear. Immediately prior to the last credit the screen cracks, the cracks widen to form a completely white screen on which the last credit appears.

Design: Number 96

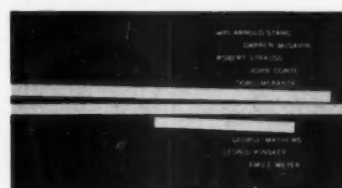
'The Man With The Golden Arm'

United Artists

The title opens on a black screen with four white bars appearing in succession from the top of the screen, after which a group of credits appear. All but one bar disappears, and this forms the beginning of a new bar configuration which in turn cues the appearance of another group of credits. This pattern is duplicated throughout the title, until finally one of the bars animates into 'The Arm', the trademark for the film, to end the title with the producer/director credit.

'The Racers' Twentieth Century-Fox

The title opens to show a pattern of black and white checks which is then revealed as an automobile racing flag. It is held against a flat blue sky by an off-stage figure. The entire action and timing of the credits is cued by the action of the fluttering flag and the scream of the off-stage racing cars whipping by. The final credit to the producer comes on to the sound of a skid crash off-stage.



USA

New markets for modern silver

GERALD BENNEY

The author, a designer and silversmith, recently spent two months touring the USA to investigate potential markets for British silverware. His conclusions, reported in the following article, point to the need for British manufacturers to adopt a more vigorous approach to both designing and selling.

There is an extraordinarily large market in America for domestic silver – the type of market which does not exist in Europe. In Europe we still have the tail end of a system by which the working people produce silver almost entirely for an employing class. In America on the other hand, it is the working people themselves who form the market for goods which they produce. Thus it is easy to see that the standards of design, quality and function will naturally be different on opposite sides of the Atlantic.

It is all the more surprising to find therefore, when walking round a retail store in the USA, that the English silver is indistinguishable from the American. Some American manufacturers actually use English dies which they have bought and shipped over. This surely must deter even the most ardent English enthusiast when he comes face to face with two identical fake antiques – one produced in England, selling at 50 per cent more than the other produced in the USA. Nearly all the English silver on sale is reproduction or fake antique on which the makers' names do not appear.

The characteristics demanded in the USA are those of cheapness, serviceability and conformity to existing fashions. Quality as such does not have the same selling power as attractive appearance. Quality means longevity which is a commodity not in demand in a country that relies, to a great extent,

on constantly destroying the old to make way for the new.

Statistics from the official census bureau in the USA show that the American woman has more to say in buying for the home than her husband. This transfer of responsibility has forced the manufacturers to produce articles of a more feminine nature and appeal. This is especially so in the flatware trade where the greatest sale is to young brides, of whom 70 per cent select for themselves; about 24 per cent get the help of a friend or relation and only 2.4 per cent inherit silver. Official figures also show these facts . . . every third bride is a teenager; half a million teenagers marry every year; 50 per cent of all brides are under 20 years of age and 33 per cent of all girls between 18 and 19 are already married.

From these figures we can see that the general pattern of taste in the market is necessarily adolescent.

To quote Max Falk of Falk and Kahn, New York – a firm specializing in product styling and development for the jewellery and silver industries: "The American woman is very stylish without knowing a thing about the styles in art history. The words Gothic, Romanesque, Baroque, have only a vague meaning, but she is well informed about

the styling of last year's hat and what is fashionable in the present. The same magazines that tell her about her fashions also tell her what is new in silverware and as it matters little to her whether her dress style is influenced by 1920 or by French *Directoire*, so it matters little whether her favourite silver pattern is influenced by *Art Nouveau* or an old Georg Jensen pattern".

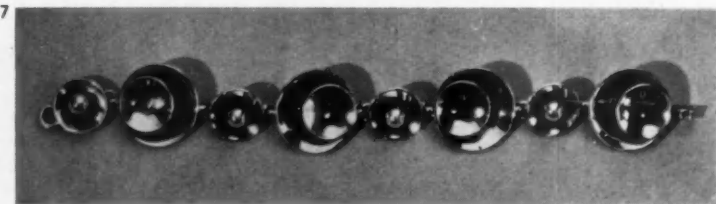
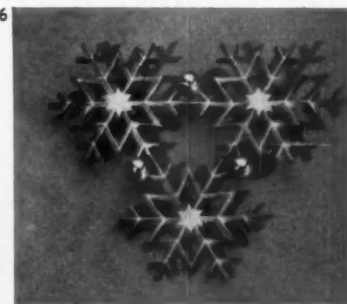
Among these alternating fashions for period styles there is a growing demand for modern silver, as shown by the increasing imports in recent years of modern Danish silverware (DESIGN June pages 38-41). One of the few American firms producing modern silver and jewellery of a high design standard is the International Silver Co, the largest firm of manufacturing silversmiths in the USA. But in spite of this modern work much of the firm's production still consists of period or reproduction silver, such as the 'Lord Robert' tea service illustrated below. In the words of one press advertisement by this firm "the spirit and detail of eighteenth century English Gadroon silver has been faithfully reproduced".

How can British silver manufacturers face up to this situation and take advantage of the opportunities which



occur? Clearly there is a danger in relying too closely on the ability to sell traditional English designs in competition with similar American made products. On the other hand, to sell modern silver it is necessary to establish a style which has an easily recognisable character of its own - a style which is distinct from the type of product which can be bought in stainless steel at a fraction of the cost.

It must be recognised, however, that tastes vary widely in different states and it is therefore important for British firms to send representatives to study market conditions. American business depends to an enormous extent on advertising and a potential exporter must be prepared to advertise on a scale which is competitive with his rivals, and to ensure that the trade name is known to the public. Efficient production, either by hand or machine in quantities large enough to ensure an economic price, is essential. Recent exhibitions of modern work organised by the Worshipful Company of Goldsmiths show that there are plenty of designers capable of doing imaginative and creative work. Given the opportunity they could develop a genuine English style and a fresh outlook for the silverware industry in this country.



1 'Lord Robert' tea service, an example of traditional English design being produced in the U.S.A. Seven piece service \$2,000.

2 This 'modern' milk jug is in fact a reproduction of a design by Paul Revere, the eighteenth century American silversmith. \$17.

3 and 4 Modern American silver of a high standard is still the exception rather than the rule - but growing demands provide an export opportunity for progressive British firms. These examples were designed by International Silver's holloware design department. Salt and pepper \$25, sauce boat \$58.

5, 6 and 7 Group of imaginative modern jewellery designed by Kurt Eric Christoffersen. 'Swiss Cheese' cuff links \$11, bracelet \$27. 'Snowflake', brooch from a matching set, \$11.

All designs illustrating this article are in sterling silver and made by International Silver Co, U.S.A.

Switzerland

Moulded plastics furniture

This range of furniture from the Swiss firm Strässle Söhne & Co shows the exciting possibilities of moulded reinforced plastics as a basic material for chairs and settees that are as suitable for the living room as they are for the office or showroom. Upholstered with foam

plastic and covered with a textured woven material specially designed for the firm these chairs have a grace of line which is emphasised by the thinness of the shells and the light metal under-frame. Unlike traditional upholstered furniture with deep springing, the appearance of comfort results from the subtle moulding of back and arms and the sense of resilience suggested by the thin cross-sections. Some modern furniture which makes use of moulded plastics construction has a spartan look which is absent from these examples. The designer was Hans Bellmann.



NEWS

CoID

The Centre's record

A report on the success of the first six months of The Design Centre was made at a recent press conference, introduced at the Centre by W. J. Worboys, chairman, CoID. Mr Worboys re-emphasised the point he made when The Design Centre was opened - that the CoID's object is "unashamedly commercial", and went on to say that initial reactions from exhibitors show that the exhibition has been remarkably successful in promoting sales of well designed goods. A number of manufacturers whose products have been on show at the Centre discussed their own reactions with members of the Press. A selection of manufacturers' comments will be published in DESIGN next month.

Sir Gordon Russell's tour

In his recent tour of Canada and the United States, Sir Gordon Russell attended the opening of new premises for Canada's Design Centre in Ottawa, and lectured on industrial design in several Canadian and US cities. During his visit to the United

States he received the bronze medal awarded to him by the Parsons School of Design, New York.

Annual Report

The eleventh Annual Report of the Council of Industrial Design has been published recently. It covers the period from April 1, 1955 - March 31, 1956 and reviews the work of the CoID prior to the opening of The Design Centre on April 26, this year. Copies are available from the CoID, 28 Haymarket, SW1, or the CoID Scottish Committee, 46 West George Street, Glasgow C2, price 1s 6d (1s 10d post paid).

Design Centre award

The CoID, on behalf of The Design Centre, was one of the six organisations to receive the British Travel and Holidays Association's certificate of commendation this year. These are awarded "to stimulate interest in the provision of new services and amenities for overseas visitors to Britain".

Christmas displays

The window displays at The Design Centre during the Christmas season will be designed by Natasha Kroll. Miss Kroll is now working on problems of design with the television service of the BBC.

REPORTS

Design panel for BTC

The British Transport Commission has appointed a panel to advise on the best

module of four ft by W. H. Colts & Co Ltd. The furniture and furnishings were chosen by the 'House Beautiful' colour scheme service. At the request of the buyers, most of it came from the lower price ranges that are popular at the store; on the whole the wallpapers, light fittings, carpets and textiles proved more successful than the furniture, but in the sitting room, illustrated here, a consistent standard was reached.

Portsmouth's 'house beautiful'

'House Beautiful' magazine has done much to encourage high standards of design in domestic architecture and interiors, and in collaboration with the directors of the Landport Drapery Bazaar in Portsmouth, has recently exhibited a show house in the store. This was a prefabricated timber bungalow, with four rooms, bathroom and kitchen, built on a



T. H. Summerson, chairman of the new British Transport design panel.

means of attaining a high standard of appearance and amenity in the design of its equipment. This announcement is to be welcomed, and deserves whole-hearted support. It follows the publication a little over a year ago of a special issue of DESIGN (September 1955) in which an urgent plea was put forward for the establishment of a progressive and co-ordinated design policy for the railways in this country, as an integral part of the modernisation plan.

In a personal interview with a member of the staff of DESIGN, T. H. Summerson, who is chairman of the panel, and Christian Barman, chief publicity officer of the British Transport Commission, discussed the panel's functions and aims. The panel will primarily be concerned with equipment of all kinds used by British Transport's passengers, customers and staff; its advice will extend to the various services covered by the British Transport Commission, and will include hotels, ships and road transport, as well as railways. The panel also intends to work towards the establishment of a house style that will be appropriate to the varied services covered by the British Transport Commission, but priority will be given to the plans for the modernisation of British Railways which provide for the building of large numbers of locomotives, railway vehicles, electrical and other installations. The panel will advise on the appointment of staff designers, but consultant designers will also be called in, and it intends to keep in close touch with the commission's architect, although it will not itself be concerned with the architectural design of buildings and structures.

The formation of this new design panel has the support of the six regions of British Railways and other managements of the commission; the panel will work closely with these, but will concentrate at first on design matters for which the commission has retained central responsibility.

The chairman of the new panel, T. H. Summerson, is a part-time member of the commission and chairman of the commission's North Eastern area board. In

continued on page 57



Walter Hayle

A SERVICE FOR ARCHITECTS

ARCHITECTS CONCERNED WITH
THE SPECIFICATION OR DIRECTION
OF DECORATIVE SCHEMES
ARE INVITED TO USE THE FACILITIES
OFFERED BY OUR
ARCHITECTS' DEPARTMENT

Demonstrating the use of wallpaper in the
station refreshment room.

Though the primary purpose of
the ARCHITECTS' DEPARTMENT is to give
advice on the use of wallpaper it is also able to deal with
enquiries concerning the
use and choice of paints and fabrics.



THE ARCHITECTS' DEPARTMENT
THE WALL PAPER MANUFACTURERS LIMITED
125 HIGH HOLBORN LONDON WC1
OR KING'S HOUSE KING STREET WEST
MANCHESTER 3

stacking furniture

Designed by Robin Day



Q-stak chair

Suitable for all projects
requiring a robust
stacking chair.

Tubular steel legs. Strong
moulded ply back and seat,
veneered beech, cherry or walnut,
or surfaced with plastic.

A version with timber legs (Q-W stak)
is also available.



Hillestak chair

The new version of this well known chair has
greatly increased strength. Backs and seats
beech, Nigerian cherry, walnut or mahogany.

Also upholstered.



Hillestak table

A strong well finished
all timber stacking
table. Frame of beech.
Top veneered Nigerian
cherry, walnut,
mahogany or surfaced
with plastic.

Write for further information and prices

Hille of London Ltd. 39-40 Albemarle Street, London W.1
Hyde Park 9576

continued from page 55

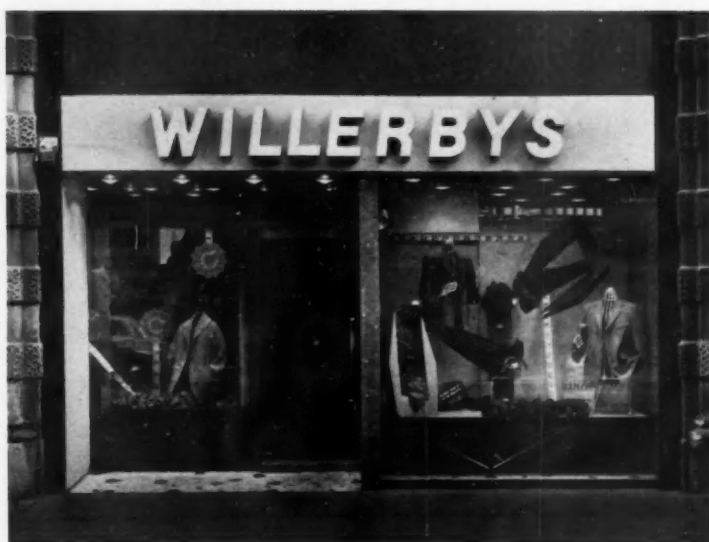
order to keep abreast of contemporary ideas in design, the commission has appointed two outside members prominently associated with the development of industrial design in this country to the panel. They are W. J. Worboys, director, Imperial Chemicals Industries Ltd, and chairman, CoID, and Sir Gordon Russell, director, CoID. The other members include three officers of the commission: Major-General L.I. Wansbrough-Jones (secretary-general), J. Ratter (technical adviser), and Christian Barman (chief publicity officer); with E. W. Arkle (chief commercial manager, London Midland region of British Railways) and E. C. Ottaway (chief supplies officer, London Transport Executive), whose contribution to the design of London Transport road vehicles is well known.

Mr Barman, who is a past president of the Society of Industrial Artists, has been appointed executive member of the panel. Like Sir Gordon Russell, and Mr Ottaway, he is a member of the Faculty of Royal Designers for Industry. He will be responsible for the administration of the panel's activities and the special design services associated with it.

USA 'Homestyle Centre'

Jay Doblin, director of the Chicago Institute of Design, has been elected president of the American Society of Industrial Designers, in succession to Arthur N. BecVar.

ASID members have been asked to collaborate in the creation of a 'Homestyle



Glasgow tailors

For some years now Willerby & Co Ltd, the tailor whose headquarters are at 110-113 Tottenham Court Rd, W1, has been developing an easily recognisable house style for its various branches. The latest of these, a new shop in Glasgow, is illustrated here. The dis-

play fittings were designed in Willerby's display studio; the giant tape measure is a feature of all the firm's window displays and advertising. The general manager, J. R. Davidson, believes that the redesign of the shops and the development of an individual house style have acted as stimulants to sales. The architect was C. J. Epril & Associates.

Poster competition

This poster, designed by G. J. Hawkins, was awarded the first prize in a competition organised recently by the journal 'British Plastics'. The competition was for a poster to advertise the 1957 'British Plastics Exhibition', to be held at Olympia from July 10-20; 51 entries were received, and posters which received awards and commendations in the competition will be displayed at the exhibition.



Centre' at Grand Rapids, Michigan. The centre is a project of the US Home Research Foundation, and it will be used as a national display of better home architecture and interiors.

At ASID's annual meeting and design conference recently, a panel of designers and lawyers discussed 'Design Patents and the Law', and concluded with a plea for more stringent laws to protect industry against design 'piracy'. At an earlier meeting Arthur N. BecVar, the outgoing president, discussed the design policy of the US General Electric Company. Mr BecVar, who is manager of the company's industrial design, appliances and television receiver division, described how a group consisting of the company's design staff, three outside consultants and a management communications expert is responsible for the design of the General Electric household appliances. Its work is based on "the concept that design, heretofore looked upon as a mysterious field, can be broken down into distinct types of activities that are different in scope and represent various skills and abilities", and in this way the group works together with the management towards an integrated design policy.

COMPETITIONS

Illuminated sign design

Details of the second illuminated sign design competition, sponsored by the Electrical Sign Manufacturers' Association, have been announced. The object of the competition is to encourage improvement in the design of illuminated signs, and

eight prizes, totalling £400, are to be awarded. The last date for receipt of entries is January 31, 1957; details can be obtained from the Electrical Sign Manufacturers' Association, 23 Bedford Row, WC1.

Designs for furnishing fabrics

The organisers of the eleventh Milan 'Triennale' are sponsoring an international competition for printed furnishing fabric designs, which is open to all artists. The last date for receipt of entries is February 10, 1957 and details of the competition may be obtained from: Triennale di Milano, 'Concorso disegni per Tessuti Stampati', Palazzo dell'Arte, Viale Alemagna 6, Milan.

EXHIBITIONS

The Jamestown festival

The Jamestown festival, to be held in Jamestown, Virginia, USA, next year, commemorates the foundation of the first permanent British settlement in the United States. One of the main events there will be an Anglo-American exhibition, and at the request of the Foreign Office, the British section is to be arranged by the Central Office of Information. This will occupy an area of 7,000 square ft and will trace the early British connection with Virginia and show the development of the British Commonwealth from the early settlement in America to the present day.

Award for exhibition stand

The Australian food stand, designed by a British firm, Richard Lonsdale-Hands

continued on page 59



ANNOUNCING
A
NEW
CATALOGUE
OF
CONTEMPORARY
STYLE
LIGHTING
FITTINGS

Head Office, Works and Showroom:
WATTVILLE RD., HANDSWORTH
BIRMINGHAM 21

Telephone: SMEthwick 1191

BEST & LLOYD
LIMITED

London Showroom:
25 MUSEUM ST., W.C.1
Telephone: MUSeum 2113

Packs

advertise

products

Do you let them advertise yours?

There are professional packaging designers. Names and addresses can be obtained from the Record of Designers; there is no charge.

Write or telephone The Record of Designers, The Council of Industrial Design, The Design Centre, 28 Haymarket, London SW1.

TRAFalgar 8000

continued from page 57

Associates, was awarded a gold medal for exhibition display at an International Food Fair in Munich recently. The 600 exhibitors at the fair were mainly from European countries.

MISCELLANEOUS

RDI oration

The annual oration of the Faculty of Royal Designers for Industry is to be given this year by Sir Gordon Russell, director, CoID, and past master of the Faculty. The meeting will be held at the RSA headquarters, 6 John Adam St, WC2, on December 13, and the title of the oration will be 'The Designer's status in industry'. On the same occasion W. J. Worboys, chairman, CoID, will be presented with the Bicentenary Medal of the Royal Society of Arts, and Reynolds Stone will be awarded the RDI diploma.

Scottish stamp design

The Postmaster-General has appointed a committee to advise on the design of a new series of stamps for Scotland. The members include E. M. Dinkel, head of the school of design and art, Edinburgh College of Art, Sir William Hutchison, president, Royal Scottish Academy and Lady Sempill, who is a member of the CoID and vice president of the DIA. While the basic design of the stamp with the Queen's portrait is to remain unchanged, the committee will suggest symbols for inclusion in the borders, advise on the selection of designs and suggest artists who might be invited to submit new designs. Similar committees are to be formed to advise on designs for Wales, Northern Ireland, Jersey, Guernsey and the Isle of Man.

R. B. Fishenden

It is perhaps too common to say of a man that he is irreplaceable, but it is true to say that there is no one who can replace the late R. B. Fishenden for his breadth of know-

R. B. Fishenden; the last volume of 'Penrose Annual', which he produced before his death, is reviewed on page 65.



Scottish journal

The journal of the Royal Incorporation of Architects in Scotland has recently appeared with a new cover, a change of format and layout, and a new title. This restyling is an

important part of scheme to widen the scope and appeal of the magazine. The first two issues of the redesigned magazine are illustrated here, together with an earlier copy. Gordon F. Huntly is design consultant to the editorial board.

ledge of all branches of printing technique. He started as an engraver; he had worked for ink makers, paper makers and for publishers, and in all these realms he had not only mastered technique, but had kept himself abreast of research in this and other countries. All these wide interests he assembled in his editing of the 'Penrose Annual', which has held a unique position amongst technical publications for both originality, accuracy and good taste.

When I first met Fishenden in the 'twenties he was treasurer of the Design and Industries Association, a good sound treasurer but generous to those like myself, who were spenders by nature and ardent for change. Always he was the source of information we turned to when faced with technical problems on type, ink, paper or process. It was typical of Fishenden that, once a teacher, he remained ready to share his vast knowledge with all who could benefit by it. His monument will undoubtedly be the magnificent 'Penrose' series, but a whole generation of printers will remember him with affection and respect.

NOEL CARRINGTON

Lectures at Manchester

K. F. H. Murrell, Hon Secretary of the Ergonomics Research Society, lectured on 'The practical relationship between operators and machines' at the Manchester headquarters of Metropolitan-Vickers Electrical Co Ltd on November 28. The lecture was one of three arranged by the company's appearance design office at Trafford Park.

Industrial design courses

The Regional College of Art at Manchester, and the Salford School of Art, have arranged a series of evening classes on

industrial design. The Regional College of Art provides a first and second year course and all the classes include lectures and discussions as well as practical work.

New laboratories

New laboratories for research into colour television have been opened at Enfield, Middlesex; they are the result of a joint project between Thorn Electrical Industries Ltd and Sylvania Electric Products Inc, of New York, and the companies aim to introduce colour television within 10 years.

'Design centre' in retail store

R. W. Weekes Ltd, a department store in Tunbridge Wells, is holding a special display of goods that have been exhibited in The Design Centre and which are on sale at the shop. Furniture, furnishings, tableware, leather goods and domestic appliances are included.

Plastics mouldings

Industrial Mouldings (Warwick) Ltd is now marketing plastics mouldings that can be chromium plated; the manufacturers claim that components so treated can be used in almost any application where zinc-alloy die-castings are used, and in some instances where a die-casting or a stamping would be impracticable.

Airtight pack

The Pearlite Box Co Ltd, West Road, Tottenham, N17 has developed a new type of airtight pack which can be used for a wide range of products. The inner wrap of the 'Hermet' pack, which is heat sealed, can consist of the type of material best suited to the product - PVC, polythene, cellulose film, etc.

continued on page 61

The new range of **PEL** Taper Tube Furniture



As instanced by the article in the January 1956 issue of 'Design', much interest has been aroused by the new range of Pel Taper Tube Furniture. Models include chairs of both the stacking and the non-stacking type, and tables in a variety of heights and finishes. In any setting where the furniture needs to be able to stand up to the hardest usage and yet be in full sympathy with contemporary design trends and of the highest quality, Pel Taper Tube Furniture meets the needs perfectly.

A catalogue illustrating the range and giving full details of heights, finishes, etc. will gladly be supplied, on request, together with name of local distributor.




PEL

MADE BY PEL LTD · GLOBUR · BIRMINGHAM · A COMPANY
LONDON SHOWROOMS: 15 HENRIETTA PLACE · LONDON · W.1
GLASGOW OFFICE: 59 WELLINGTON STREET · GLASGOW · C.2

HOPE'S

DESIGN for the TROPICS



CLEARVIEW WINDOW designed to diminish solar heat and glare while permitting 100% ventilation

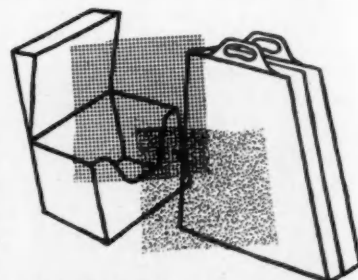
List No. 283

HENRY HOPE & SONS LTD
SMETHWICK, BIRMINGHAM
17 BERNERS ST., LONDON, W.1

Famous for Metal Windows of Quality since 1818



display packaging for selling



... packaging is not enough ... Your products must be displayed as well, attractively and forcibly. A small carton or a large display outer require sound planning and careful production to carry, display and sell the goods. We would welcome the opportunity of showing you how we excel at this sort of thing.



WILLIAM W. CLELAND LTD

ART PRINTERS · FOLDING AND FANCY BOX MAKE-UPS

Staple House Chancery Lane London WC2 phone Holborn 25.1
and CULLINGTREE FACTORY BELFAST

continued from page 59

Planning the kitchen

W. N. Froy & Sons Ltd has opened a new kitchen department in its showrooms at Brunswick Works, King St, w6, showing typical examples of the firm's 'custom built' kitchens. The 'custom built' kitchen service, introduced by Froys two years ago, advises on layout and planning for customers who wish to add to their kitchen equipment gradually as well as for those equipping new kitchens.

A new tractor

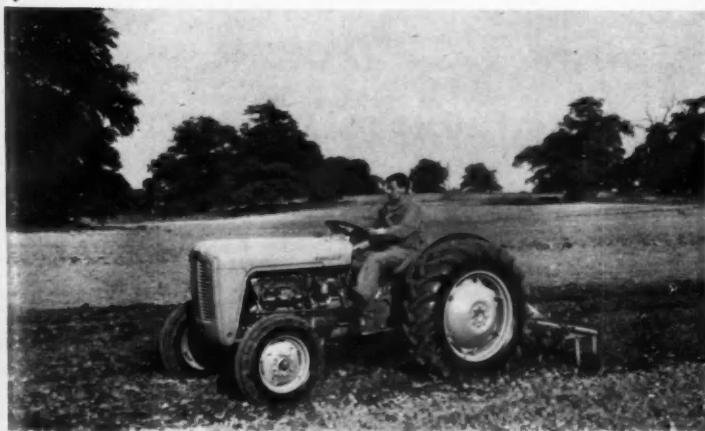
The new 'Ferguson 35' tractor is a compact and powerful machine which has been designed to produce a high degree of efficiency and convenience in operation. The Ferguson system of transferring the weight of the implement to the back axle and designing a range of tools as an integral part of the tractor, has in this new model been refined and improved.

The farm tractor must operate under conditions of working which vary more widely than those for most other machines. In the past this has meant that agricultural machinery has too often had the air of an improvised contraption, little attention being paid to the convenience of the farmer who has to use and look after it. The 'Ferguson 35' is a definite step in the right direction.

The engineering care and skill which have improved the control of speed and depth of working and the ease of operating have produced a tractor whose appearance, although not beyond criticism, is much more expressive of these advantages. In a product which sells widely all over the world it must surely be a sales point that the tractor looks as good as it is. Certain aspects of the tractor and the striking design in grey and bronze on the large envelope given to the Press are hopeful signs that Massey-Harris Ferguson Ltd is beginning to work towards a co-ordinated design policy.

J.N.W.

Besides the diesel tractor, shown here, petrol and vaporizing oil versions are also available.



Design: Number 96

New appointment

Miss Mary George, principal information officer, Ministry of Agriculture, Fisheries and Food, has been appointed director and secretary of The Electrical Association for Women.

Man-made fibres booklet

The British Man-Made Fibres Federation has recently issued a booklet 'Facts about man-made fibres' giving information about the properties and care of all the British man-made fibres.



The difficulty of starting a diesel tractor, especially in cold weather, has been tackled in the 'Ferguson 35'. It has a four position starter switch, and in conditions below 32° F, the switch can be moved so that it operates the heater plug before starting. The switch returns to the 'off' position when released.



The 'De-luxe' model has a deep seat fitted with a foam rubber cushion covered in weather resistant material.

Letters

'Stamp Design'

A designer's opinion

SIR: Edgar Lewy's article (DESIGN October pages 37-41) deserves the most careful study by the postal authorities and others interested and active in stamp design. What is not generally realised is that quite apart from the cramping design conditions, the actual terms of entry for stamp competitions are such as to discourage many designers from participating.

The fact that designers may submit up to two roughs rather than a single carefully thought out design precludes the concentration of effort and skill necessary in the first stage of stamp design. Many experienced artists prefer to carry their ideas to a more finished state than the rough before they are seen and thus feel more confident that they have done full justice to their original conception. This is particularly true in stamp design where the development of detail may prove all important from both design and reproduction points of view. I believe the rough design of a stamp is often misleading as to what can finally be achieved in print.

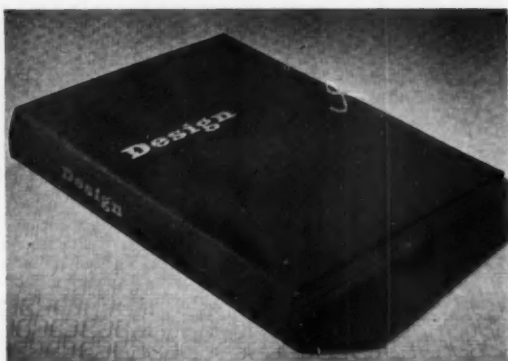
The total number of artists invited to participate is never revealed in the original invitation but I have reason to believe that the eventual number of designs submitted is ridiculously high. A restricted entry of possibly not more than six first class designers, selected in rotation if need be, would result in a much higher standard of entry. The names of judges are withheld and to the best of my knowledge no independent designer or representative of the Society of Industrial Artists is on the judging panel. Some designers fear that the secrecy of the judging offers opportunities for the abuse of their rough ideas.

Fees in Great Britain compare very unfavourably with those of other countries. Total fees for approved designs are inclusive of co-operation with the printer after final acceptance, which may involve the designer in much loss of time, often for consultations over faults not of his making. In some countries supervision of reproduction merits an additional fee.

There has been no increase in fees for approved designs since 1947 despite recognised increases in other branches of design and of course in printing costs. As the basic preparatory work for a rough or more finished drawing is the same, the commissioning of a rough at exactly half the fee offered for a more finished first submission in 1947, is highly questionable policy by a government department concerned with the good name and reputation of British stamp design. Is it too much to expect that the whole outlook regarding our stamps and their designers should now be reconsidered?

ABRAM GAMES
41 The Vale
London NW11

continued on page 63

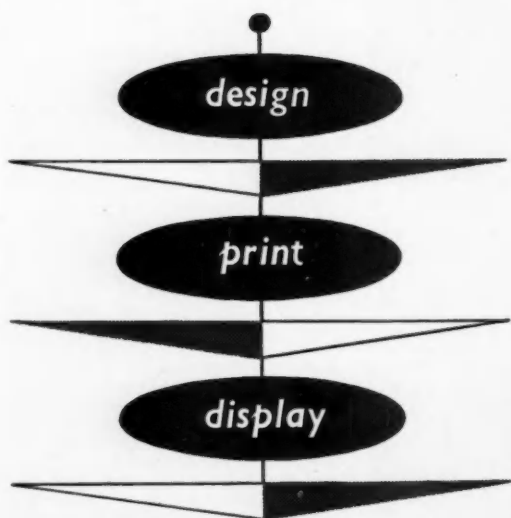


BINDERS FOR **Design**

are now available attractively bound in vermillion linen, DESIGN gold-blocked on front and spine and lined with black inside the covers

Two metal strips slide through the wire stitches. Each binder will hold 12 copies of DESIGN published after April 1954.

BINDERS FOR DESIGN cost 11s each, or 12s post free from the Circulation Manager, DESIGN, 28 Haymarket, London SW1.



WALKERS
(showcards) limited
MANCHESTER 1. CEN. 4965/6/7

A SQUARE DEAL

FOR ANY PEG!

We try to adapt ourselves and our stock to suit the needs of all users of fine English woods.

TURNERS of LEWES

Specialise in Craftsmen



Albert Turner & Son Limited
35 High Street, Lewes, Sussex
Telephone: Lewes 520



One of the Swedish 'Three Crowns' stamps mentioned in the letter below.

Room for new conceptions

SIR: I welcome your publication of Edgar Lewy's article on colonial stamp design. If his suggestions were adopted the situation would be improved out of recognition. But has he said enough?

He has in general been content to show how current designs could be better executed, but surely an expanding Commonwealth has room for altogether new conceptions? I should have thought, for instance, that the way ahead for heraldry on stamps is pointed out by the current Swedish 'Three Crowns' stamps, rather than by the George VI 2s 6d, good though that is. And after his opening sentences, how has Mr Lewy brought himself to deal so cursorily with the superb achievement of Western Germany? Surely this open attempt at visual education is more useful to an 'underdeveloped area' than the slightly patronising praise of the 'Noble Savage' that underlies French colonial design. This article, and particularly the illustrations, make an unanswerable case, but only continual exhibition of the good can oust the bad in this field. More, please!

DAVID BARKLA
9 Queens Road
Bromley
Kent

Improving designs by committee

SIR: One of the many facets of stamp collecting is the study of designs; during the past 25 years these have undergone serious deterioration, and it is to be hoped that Edgar Lewy's article in the October issue of *DESIGN* will be seen by those responsible for such mediocre work.

It does not seem as though a solution will be reached by open general competitions, for there have been many failures in this respect. As far back as 1839 there was in this country a Treasury competition with £300 in prize money; some 2,600 entries were received, the majority were quite useless and in fact none was used. Time has indeed stood still in this respect, and modern stamps that will bear comparison with Great Britain's 'Penny Black' of 1840 are still awaited.

The formation of a special art committee to consider new colonial stamps would no doubt bring about a long awaited improvement. Several other countries have a

'Graphic Art Advisory Committee' so what about one in London?

In any event let us have no more commemorative series basically the same except for the name and value tablet and colour, no more issues just with the royal portrait changed and finally no more ordinary issues converted to commemoratives by means of an overprint. All this is taking the easy way out.

DAVID H. JONES
Hon Secretary, Scottish Philatelic
Society
7 Saughtonhall Place
Edinburgh 12

The craftsman engraver's skill

SIR: Thank goodness someone has had the pluck to criticise our stamps at last. I agree with every word Edgar Lewy has written, although I happen to be one of the old school of stamp engravers, as was my father before me. (There are a few left, you know.) Indeed, even in my apprentice days, I considered our stamp designs far behind those of other countries.

Mr Lewy's inference that such stamps could be an excellent form of publicising a country's amenities is an idea that our Government would do well to consider. Perhaps the Board of Trade would back the idea with the help of the British Travel and Holidays Association.

I am grateful, too, for his appreciation of the security engraver's skill. Such men were – and still are – real craftsmen, who never cut a single line without it having a meaning.

Why not, as Mr Lewy says, enlist the advice and services of such men?

E. G. DISMORE
85 Village Way
Pinner
Middlesex

A further series of articles on stamp design by Edgar Lewy will be published in subsequent issues of *DESIGN* – Editor.

'Where are we sailing'

Decoration in ships

SIR: Peter Hatch's article on decoration in passenger ships (*DESIGN* September), interested us very much indeed. From our point of view it is a salutary development that professional designers, as opposed to specialist advisers, are taking an interest in the internal decoration of British liners.

'Arabian Lights' in Regent Street

The illustration shows an artist's impression of this year's Christmas decorations in Regent Street. As in previous years they have been

Our own axe, which we grind without shame, is the provision of non-combustible structural materials for use in these ships and it is somewhat of a headache to us that the conventional 'advisers on décor' to the shipbuilding companies find it difficult to accept our material for the single but inadequate reason that it is not wood.

In Scandinavian countries, Germany, Italy and America, and most recently in France, we do not find this mania for designing all public spaces in one basic material, wood; in these countries the architects and shipbuilders seem to be willing to use more progressive materials with greater imagination and with a less restricting reference to public house and Ritz Hotel type interiors. Our own material 'Marinite' was used very extensively throughout the Norwegian motor vessel 'Bergensfjord', and although the ship was built and decorated by British shipbuilders and decorative craftsmen, her style does not belong to the 'auntie's bedroom' brigade.

This would seem to prove that we are on the right lines in insisting that the use of non-combustible materials imposes no restriction whatsoever on the ideas of decorative artists whether they be ultra-conventional or forward-looking.

May I draw your attention to the illustration of the cafeteria in the 'Bergensfjord' on page 28; we believe that the material shown is wood veneered 'Marinite' and not plastics laminate at all. The "concern for the crew" in this case includes the provision of a non-combustible bulkhead containing this space, so that a fire inside cannot spread outwards, nor can fire outside spread inwards to the mess. The fact that any satisfying decoration can be applied to the bulkhead itself is in our view secondary, although the combination of functional safety and decorative satisfaction is an excellent solution.

I would also like to draw your attention to the complete absence of a disfiguring sprinkler installation throughout the 'Bergensfjord'. This has imparted to the whole of the ceilings throughout this ship an elegance and continuity unequalled in any British ship, owing to the quite unnecessary enthusiasm for a sprinkler system.

GEORGE HUTCHESON
Sales Director
Marinite Ltd
114 & 116 Park Street
London W1

continued on page 65

designed by Beverley Pick. The 'Arabian Lights', produced by W. S. Chrystalline Ltd, consist of internally illuminated lantern units, approximately 8 ft high, suspended at various levels above the street.





90 Staff dining tables in solid walnut or mahogany, size 5' 6" x 2' 3" and 540 chairs used by B.P. Research Co Ltd.



'Popular' stacking chair in walnut, mahogany or beech, fully upholstered as illustrated, or with wood seat and back veneered to choice; also 'Marine' stacher in teak.

Write for further information and prices
BERESFORD & HICKS
 of LONDON EC2

BRITISH INSTITUTE OF MANAGEMENT

National Conference 1956

MANAGEMENT- PROFITS-LIVING STANDARDS

The full text of the papers presented at Britain's most important management conference will be published in December.

The twenty-two papers include:

THE DESIGN FUNCTION - GAP OR BRIDGE BETWEEN PRODUCTION AND SALES?

Mr. D. W. Morphy, Joint Managing Director, Morphy-Richards Ltd

MANAGEMENT'S RESPONSIBILITY FOR PUBLIC RELATIONS

Sir John Elliot, Chairman, London Transport Executive

EFFECTIVE COMMUNICATION IN INDUSTRY

Mr. R. H. Coates, Divisional Controller, Central Electricity Authority

THE COSTS OF DISTRIBUTION - HOW CAN THEY BE CONTROLLED?

Mr. C. A. Edwards, Managing Director, S. C. Johnson & Sons Ltd

ORGANIZATION AND METHODS - ITS VALUE TO MANAGEMENT

The Viscount Stopford, OBE, Head of Office Administration Department, ICI Ltd

These practical papers, that are designed to help managers solve many of their current problems, are essential reading for all persons holding responsible positions in industry and commerce.

FOR FULL DETAILS PLEASE COMPLETE AND RETURN THIS COUPON ▼

To Management Publications Ltd
 Management House
 8 Hill Street, London W1

Please send me, without obligation, full details of the papers read at the BIM conference **MANAGEMENT-PROFITS-LIVING STANDARDS**

NAME

ADDRESS

continued from page 63

The designer's training

SIR: I was most interested to read the article by Peter Hatch on ship interiors (DESIGN September pages 25-28). I fully agree with Mr Hatch's comments on the lack of training facilities. I commenced my studies as a naval architect in 1936, working in the shipyard drawing office during the day and attending classes in the evening. The course leading to Associateship of the Institute of Naval Architects took seven years. This course deals most efficiently with all aspects of the ship as a machine, but contains no hint of aesthetic training whatever. The naval architect is fully trained to produce a structurally and mechanically efficient ship, but he is not taught to think at all about appearance.

After the war when I decided to concentrate on the interior design of ships I was completely at a loss to find any type of course covering this work. I finally decided that the normal architect's course leading to Associateship of the Royal Institute of British Architects was most suited to my requirements and I am now in the final stages of that course, by part-time study.

To refer to the article in more general terms, I think it is certainly the case that British ship owners and ship builders get the type of interiors which they want. But it is difficult to appreciate the train of thought that will produce an eighteenth century interior in a twentieth century ship.

I do not think there is any lack of talent, skill or ability in Britain. If the ship builders and the ship owners enquire they will find the skills necessary for the work.

FREDERICK B. SIMPSON
9 Kilmaurs Street
Glasgow SW1

British scooters

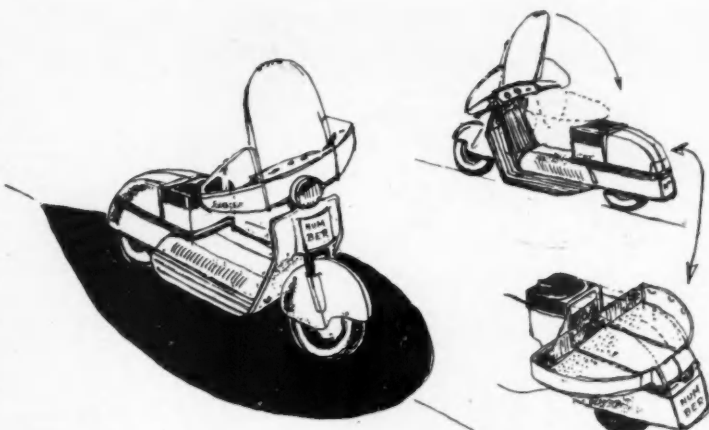
SIR: Your excellent article 'Where are British scooters?' (DESIGN October pages 22-27), curiously omitted a few historical facts.

Piaggio of 'Vespa' fame stated recently ('Mechanics Illustrated' [USA] and 'Readers Digest', Jan 1955) that he set to work after the stimulating experience of seeing one of the scooters used by British paratroopers during the war. The early 'Welbike' and its postwar version, the Brockhouse 'Corgi' were first in the field - although there were some similar vehicles made in the 'twenties.

The creation of a new vehicle for a new clientele was further pursued, and I was, in fact, called in by Brockhouse Castings Ltd and Colonel J. Dolphin to assist them with the development of the 'Husky', to follow up the 'Corgi'.

This was eight years ago, and a year before I first saw an Italian 'Vespa'. The chassis, as Col. Dolphin designed it, was revolutionary in its conception, and he also demanded a bodywork that would fold up into a tiny space (like the Corgi) so that the vehicle should go under a kitchen table or into the boot of a car. My consultant's lips are still sealed as to other details of that chassis. The resulting design I developed is indicated in my illustration, and it is similar to the type of vehicle which has since become so well known.

In those years when factories did not



British scooter project

Thumbnail sketches of a scooter designed in 1948 for Brockhouse Castings Ltd. It was

meant to fold up into a small space, have an openable parcel locker at the rear, and the (then) new 'Perspex' windshield. Glass fibre was visualized for some of the panel work.

know which way to turn to meet their existing commitments this Brockhouse scooter did not get into production.

Now that the marketing position has changed of course, it is probably too late to introduce British scooters.

Perhaps we should be busy creating a really ideal urban four-wheeler, and succeed where the Messerschmidts and Isettas have so far failed, by producing the local runabout, that 'second car' that parks easily when shopping in our busy streets.

Our small vehicles always tend to look like miniature racing cars (without the speed of course) catering for a few sporting enthusiasts rather than filling a widespread need which is now so abundantly evident and which has been for a long time so easy to analyse.

With the scooter type vehicle Britain was both first and last in the field. Let us hope for better timing of design and development on the next 'type'.

GEORGE FEJER
25 Wimbledon Close
The Downs
London SW20

British Railways' symbol

SIR: One gathers from the half hearted criticism of the British Railways' symbol (DESIGN September page 49) that this type of thing whilst bad, could be much worse.

Surely the time has arrived where harsh criticism, when deserving, should be given.

When one compares this symbol with the new treatment given to the 'New Haven' railroad system in the USA strong words seem to be very necessary.

If British Railways is keen to foster good public relations and has any eyes at all on the tourist trade, then I suggest design planning really begins at all levels and stages, including a new and fresh approach to livery and symbol recognition.

NORMAN E. WILKINSON
30 Wolverley Road
Solihull
Warwickshire

Books

Penrose Annual, Volume 50, 1956, edited by R. B. Fishenden, Lund Humphries, 35s

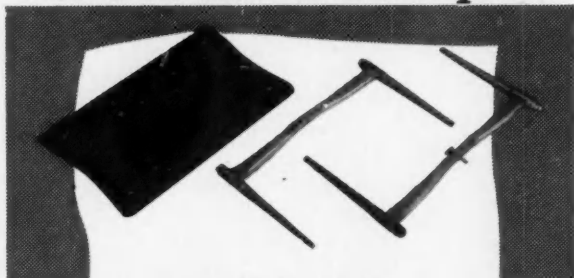
The publication day of this year's 'Penrose Annual' was one for great jubilation, for this was the fiftieth volume and also the twentyfirst year of R. B. Fishenden's editorship. Now, with the sad news of his death, it is the last work of an amazing man who, when most of his contemporaries had opted for an armchair by the fire, continued to pour as much enthusiasm and youthful energy into his editorial work as he had done so consistently throughout the 21 years of his fruitful association with the 'Penrose Annual'.

This volume was compiled with Mr Fishenden's usual skill, and the general section is a careful blend of historical research and up-to-date information of all that is new and vital in printing and the graphic arts. There are two complementary articles covering the printing renaissance between the wars: one on the great master printer Harold Curwen, by Christian Barman; the other, by Desmond Flower, dealing with the book illustrations of E. McKnight Kauffer. Alec Davis digs deeper into the past with an essay on early package design and comes up with some fascinating illustrations of the folk art tradition of this medium.

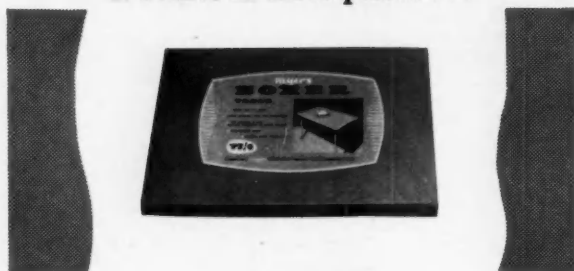
For the present day, Peter Sely and Robert Kostka have written an analysis of graphic design in the USA which includes lively examples of current work by American artists. In a survey of Post Office printing since the war Misha Black combines praise for its enlightened patronage with a sharp rap on the knuckles for its treatment of Leonard Beaumont's fine cover

continued on page 67

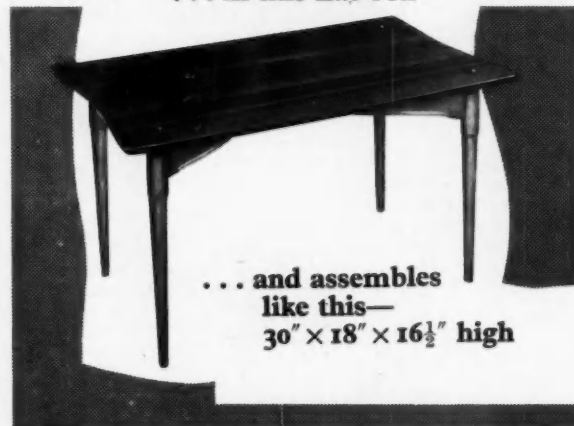
the BOXER sets the pace



It comes in three pieces . . .



. . . in this flat box



. . . and assembles
like this—
30" x 18" x 16½" high

There's nothing like it anywhere—this trim table a child could assemble in half-a-minute. (No tools needed.) So handy for storing—(retailers note!)—you can fit 6 boxed Boxers in the space of one ordinary table. So practical, too—the neat, sleek lines blend with any decor, the finish gamely resists heat. With natural oak, mahogany, or stripey walnut veneered tops, you can buy a Boxer for only 77/6. See it for yourself at the Design Centre.

made by **Myer's**

who also make comfortable beds

HORATIO MYER & CO. LTD., VAUXHALL WALK, S.E.11

Telephone: Reliance 2241 (9 lines)

Patent applied for
Registered design No. 878412

CoID photographs

METHODS OF BOOK DESIGN

THE PRACTICE OF
AN INDUSTRIAL CRAFT

HUGH WILLIAMSON

The author provides an essential manual of printing design for all who are concerned in any way with the quality of printed matter—authors, printers, publishers, librarians, artists, advertising agents, students, teachers, or the general public. Although the book contains much that will be invaluable to the professional typographer, the layman will have no difficulty in understanding the description of the various techniques and of their uses.

Illustrated 45s. net

OXFORD UNIVERSITY PRESS

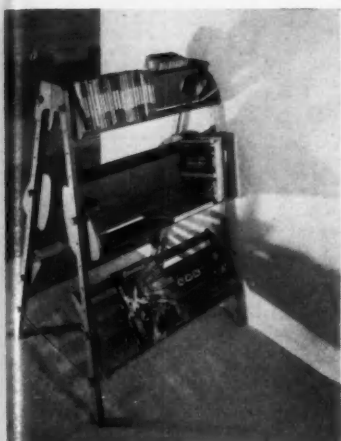
CITY OF LEICESTER EDUCATION COMMITTEE

For departmental prospectuses apply to the Registrar



Leicester College of Art

PRINCIPAL: E. E. PULLER A.R.C.A. F.S.A.E.



Adaptable bookshelves

These bookshelves were designed by Peter Brunn in 1953, and are now on sale in France and Switzerland. The various units can be built up to form a wall bookcase, as well as the free standing model illustrated here. The arrangement of the shelves is adaptable and all parts can be packed flat for transport.

continued from page 65

design for the telephone directory, now disfigured with advertisements.

There are several articles on lettering and type design, among them an appraisal of Linotype's 'Minerva' designed by the wood engraver Reynolds Stone, and an interesting comparison between Ashley Havinden's new script type for Monotype and Roger Excoffon's 'Mistral' for the Olive Foundry. The latter is a very impressive technical and aesthetic achievement.

Charles Rosner provides a challenging thesis on the artist's present need for a unity of conception and execution, and there is a study on the legibility of typefaces by Beatrice Warde, which should raise quite a dust among typographers.

Last year's 'International Printing Machinery and Allied Trades Exhibition' (IPEX) at Olympia was an event of vital importance to the industry. The 'Training for Tomorrow' exhibit, which dealt with education and design in printing, is described by Charles Pickering, who headed the committee responsible for this section of the exhibition.

IPEX dominates the technical section, of course, and the many innovations first shown there are amply discussed. Designers are perhaps inclined to skip through this section, pausing only at the more compelling illustrations, but they would do well to take notice of a short item called 'A simplified posterizing technique'. As the illustrations show, this process produces a most striking image from a normal photographic print and could be used very effectively in magazine and advertisement work.

At the end of the book there is the usual collection of 'Illustrations of the year' greatly enlivened by a special section de-

signed and produced by the London School of Printing and Graphic Arts.

The typography and layout are well mannered and unobtrusive. Production, by Lund Humphries, reaches the expected high standard. K.G.

An obituary notice of R. B. Fishenden appears on page 59.

Lund Humphries Types, Herbert Spencer. To design a type specimen book for a printer is notoriously the most exacting task for a typographer, as witness the many ambitious failures. The seeming freedom which the designer enjoys is at the root of his difficulties. Herbert Spencer's handbook for Lund Humphries disarms criticism to a large extent because it announces itself as an 'interim measure'. In fact it is little more than a quick reference book for customers, who must supplement it with the Monotype specimen sheets or other material generally available. The machine set specimens, all in 10 point, tend to be rather unfair to several faces, especially on the hard-surfaced paper used for the book. The introduction set in Gill Sans Bold is far from demonstrating its suitability for continuous reading. It is to be hoped that Mr Spencer will find time to complete a full working type specimen book in the near future, and that Lund Humphries will also find time and machine space for it. I trust the publishers will also keep to the handy octavo sizes and not stint the setting of book faces at all sizes and with the usual variations of leading. The perfect type specimen book is doubtless a dream, since its use is varied, but a few printers have got pretty near it and I do not know any surer road to goodwill. NOEL CARRINGTON

Automation, friend or foe? R. H. Macmillan, CUP, 8s 6d

Packed into less than one hundred pages we have here something more than a superficial look at the meaning of automation. The author has commendably emphasized the underlying principles of automatic control in a way that the intelligent layman can understand.

Considerable space is given to the history and meaning of negative feed-back and to the problems facing designers of stable control systems. Later chapters consider some economic implications of automation, the use of computers for clerical work and machine control, and probable future trends.

The word 'design' appears many times: the design of inspection devices, design of plants for 'controllability', and possibly of greater general interest, the statement that "many of our most familiar articles will have to be radically redesigned in the next few years". Of particular merit is the inclusion of a few paragraphs on the human operator as a link in a control system. The author presents the "golden rule for the designer of a system involving a human link", which should be printed in capitals: "SUIT THE MACHINE TO THE MAN, RATHER THAN ATTEMPTING, BY ELABORATE TRAINING, TO FIT THE MAN FOR A NEEDLESSLY DIFFICULT TASK".

The faults are few. One may be mildly disappointed to find that design for ease of maintenance is not mentioned, and surprised that economics are considered before

computers. Nor is binary counting described. The layman might be aided, too, by a few line drawings, (there are eight half-tone plates), and possibly by a brief glossary of such phrases as "period of rotation". These could probably be included at the expense of part of the chapter on future trends.

Mr Macmillan obviously knows his subject, and how to present it. His book is the best brief introduction to the principles underlying automatic production which this reviewer has seen. C. H. BAKER

How to Build Children's Toys and Furniture, Norman Cherner, Crosby Lockwood & Son Ltd, 15s

Having made many simple toys for my own and other people's children, I felt a parent to parent understanding with the author of this book, and agreed "that many of them (bought toys) were too expensive or fragile and lacked understanding of children's needs". I also found delight, not only in seeing what 'clever' simple toys he had produced, but also in the similarity between some of his designs and methods of construction and my own. This of course is not surprising, for the love of boats, lorries and trains is perennial with children and makes them a natural choice. Their shaping and construction comes from tools and materials used simply.

Here then are the basic symbolic toys, together with clear instructions on their making, from which children gain so much pleasure in their world of make-believe, before reaching the age of chemistry sets and airplane kits.

The second part of this book covers the making of chairs, tables and storage units for children's rooms. And although there is much useful information here, there is a crudeness about the designs which is to be regretted, for basic simplicity is muddled up with fashion clichés. However, the book as a whole should prove a useful reference to all of us when asked to 'Please make something' and it would not come amiss as reading for some toy manufacturers.

DENNIS YOUNG

Designers in this issue

Douglas Annand, MSIA (30). Enrico Arno (33). Christian Barman, RDI, FRIBA, FSIA (57). Saul Bass (50). Geoffrey P. Baxter, DEARCA (35). Kenneth Bayes, FRIBA, MSIA (19-23). A. BecVar, SID (57). Hans Bellman (54). Gerald Benney, DEARCA (52). J. Beresford-Evans, MSIA (39). Misha Black, OBE, FSIA (19-23, 29). K. J. Bredon (33). Peter Brunn, MSIA (57). David Carter (30). Sir Hugh Casson, MA, RDI, FRIBA, FSIA (47). Lady Casson, ARIBA (47). Hulme Chadwick, ARCA, FSIA (18). Kurt Eric Christoffersen (53). Neville Conder, ARIBA, MSIA (47). Robin Day, ARCA, FSIA (29). E. M. Dinkel (39). Peter J. Dixon, MSTD, MSIA (30). Jay Doblin (57). George Fejer, MSIA (29, 65). F. Finn (32). David Fowler, MSIA (32). Judith Francis (33). André François (32). Kenneth Garland (Art Editor, cover). Alexander Gibson, FRIBA (20). Peter Hatch, MSIA (29). Clifford Hatts, ARCA, MSIA (23). G. J. Hawkins (57). John J. Herbert (35). Gordon F. Huntly, DA, MSIA (59). Karo, MSIA (30). G. T. Knipe, MSIA (30). Natasha Kroll, FSIA (55). Raymond Loewy, SID (40). Joseph Low (33). N. Lowndes (49). D. K. McGowan (39). Cecil Meyer (31). Neville Morgan (37). Negus and Sharland (33). B. A. North (26). E. C. Ottaway, RDI (57). Beverley Pick, FSIA (63). David Queensberry (34). Ernest Race, RDI, FSIA (34). Ronald Sandiford, MSIA (23). Basil Spence & Partners (36). R. Stevens (38). Sheila Stratton, ARCA, MSIA (29). W. R. Szomanski, MSIA (30). F. Themerson, MSIA (33). J. S. Williams (19). Sir Owen Williams and Partners (19). Alice Woudhuysen (30).

CLASSIFIED advertisements

Rates: 6d per word (minimum, 10s).
Box numbers, 1s extra

Copy: Last date for copy is 10th of
month preceding date of issue

RECORD OF DESIGNERS

MANUFACTURERS requiring the services of designers, whether for staff positions or in a consultant capacity, are invited to apply to the Record of Designers Cold, London, or to the Cold, Scottish Committee, 46 West George Street, Glasgow G2. They can obtain a short list of designers suitable to their particular purposes, which should be explained in some detail. This service is free to British manufacturers and incurs no obligation.

SITUATIONS VACANT

IF YOU are an experienced designer-draughtsman and are looking for an interesting and congenial position this may appeal to you. We are a leading west-end firm and our studio is being expanded and we have a vacancy. The work is extremely varied and covers everything from ship interiors to private houses. Please send us details of your experience, and salary required. Box 217, DESIGN, 28 Haymarket, London SW1.

DESIGN RESEARCH UNIT has vacancy someone take charge small so called 'library', to maintain files indices of catalogues, samples, photos, magazines, books, technical information etc., assist architects designers research new materials, fittings. Methodical approach, liking for routine and filing, ability to type own letters, all essential; some knowledge of architectural design field desirable. Write Business Manager, 37 Park Street, London W1.

FREE LANCE DESIGNERS. The Design Department of J. Lyons & Co Ltd, Cadby Hall, are interested in Food Packaging, Typography, Graphic Design for original Menus and similar work. Telephone for appointment Riverside 2040 Ext. 1094.

LONDON COUNTY COUNCIL LONDON SCHOOL OF PRINTING AND GRAPHIC ARTS

As soon as possible, Teacher in the Design Department, with creative ability and wide trade experience in Typographic or Commercial Design. Ability to lecture on design and production essential. Salary £1,200 x £30 - £1,350 plus London allowance £36 or £48. Application forms from Principal at School, Back Hill, BCI returnable by 15th December 1956. (2005)

PART-TIME DESIGNER wanted. Costume Jewellery Manufacturers. Reply Box 212, DESIGN, 28 Haymarket, London SW1.

The British Transport Commission invite applications for the post of DESIGN OFFICER. The Commission have recently appointed a Panel to advise them on the aesthetic and amenity design of new equipment for British Railways and other parts of their undertaking; the Design Officer will be responsible for the administration of the Panel's work, including the appointment and co-ordination of professional industrial designers. The salary will depend on qualifications and experience, but will not be less than £1,900.

Candidates should have proved ability in administration, preferably involving some form of design. They should possess a sound appreciation of industrial design and be familiar with recent developments in the design field. Professional qualifications in industrial design, architecture or engineering would be an advantage but are not essential. The selected candidate will join a contributory superannuation scheme.

Applications giving full particulars to: Director of Establishment and Staff, British Transport Commission, 222 Marylebone Road, London NW1, not later than Monday 10 December.

POINT OF SALE DESIGNERS

Applications are invited from competent men or women with current experience of designing in the point-of-sale field or able to show they have a strong flair for it. We are of course looking for top-flight people to join the best team in the point-of-sale business at our London Studios and we are always interested in hearing from designers who feel they have something to contribute to our Industry.

Positions available are permanent and a contributory pension scheme is in operation.

Address your letter (marked Confidential) to the Managing Director giving details of past and current experience and state salary required.

Leon Goodman Displays Ltd, 119 125 Whitfield Street, London W1. Telephone Euston 5351.

SITUATIONS WANTED

YOUNG FURNITURE designer, cabinet and chair frame, wishes to work with manufacturer dealing with modern trends. Box 215, DESIGN, 28 Haymarket, London SW1.

CONTEMPORARY FURNITURE DESIGNER seeks post or free lance commissions. Can produce short runs or prototypes. Experience in plastics; adhesives technology; sales management. Box 214, DESIGN, 28 Haymarket, London SW1.

YOUNG QUALIFIED industrial photographer with keen interest in modern design seeks position in illustrative, or commercial photography, with progressive firm. Box 213, DESIGN, 28 Haymarket, London SW1.

DESIGNER STYLIST, 25, over 4 years experience Domestic Radio, Television, Appliances, some exhibition experience, seeks progressive opening, furniture, unit furniture, fittings. Box 218, DESIGN, 28 Haymarket, London SW1.

FRAMING

PICTURE FRAMES available in all sizes. Special design and finishes made to

order. Mounts cut in a fine range of new colours. The Rowley Gallery, 87 Campden Street, off Kensington Church Street, W8. PARK 4349.

COMMISSIONS AND DESIGNS WANTED

INTENDING EXHIBITORS at Overseas Fairs should contact DAVIES TURNER & CO LTD for free guidance. Specialists in packing and shipping Exhibits and Stands. Phone Sloane 3455 or write to 4 Lower Belgrave Street, London SW1, quoting Ref UX 680.

FREE LANCE INDUSTRIAL DESIGNER offers services for product design in engineering and plastics. Original design, re-design, models prototypes, working drawings. Box 181, DESIGN, 28 Haymarket, London SW1.

EXHIBITION STANDS, Interiors and Quantity Displays. Our comprehensive EXHIBITION SERVICE specialises in three-dimensional advertising, working to Designers' and Advertising Agents' own drawings, or to our own designs. We shall be pleased to quote you. FLUSH WOODWORK LIMITED, 641 3 Romford Road, London E12. Telephone GRANGEWOOD 0123 (3 lines).

FREE LANCE DESIGNERS of toys and display units want work for foam and hard rubber, plastics, wood pulp etc. Wide experience of processes, pattern making and moulding. Box 216, DESIGN, 28 Haymarket, London SW1.

MOTOR BODY STYLING ENGINEERS

HUGO G. POOLE, MSIA, Industrial Designers, Broadgate House, Coventry, telephone COVENTRY 62562. We specialise in advanced projects for passenger and commercial vehicle body design and also product design. We believe we have a sensitive and intelligent understanding of form, line, texture and colour which is coupled with an expert knowledge

of the very latest manufacturing techniques and in particular sheet metal die design. We are more than qualified to develop designs beyond the illustration stage by supplying mock-ups and component working drawings, and co-ordinating the work through to pre-production stage. To those interested we welcome all enquiries.

TOP FLIGHT designers. Have you tried your hand at designing for Plastic Curtaining Material? We want to buy first class bold designs, please 'phone or write to: Velvet Print Sales Dept. (Mr K. C. Taylor) BX Plastics Ltd, Highgate Station Avenue, London E4. Telephone LARKSWOOD 5511.

PRINTING

THE CARAVEL PRESS offers a practical design and printing service to all who appreciate original ideas and first-class production. 11 Moxon Street, London W1. HUNTER 0492.

PROTOTYPES AND MODEL MAKING

RICHARD DENDY & ASSOCIATES, 4, 5 and 6 Seaton Place, Hampstead Road, NW1, telephone EUSTON 761 and 1981, welcome your inquiries for experimental, engineering, architectural and ship models, clay modelling, plaster casts, commercial lettering, rubber and plastic prototypes, animated displays, designs and drawings, prototypes and mock-ups, film special effects and models, production runs in rubber, plastic and white metal, amusement slot machines, theatrical properties, masks and costume trimmings and window displays.

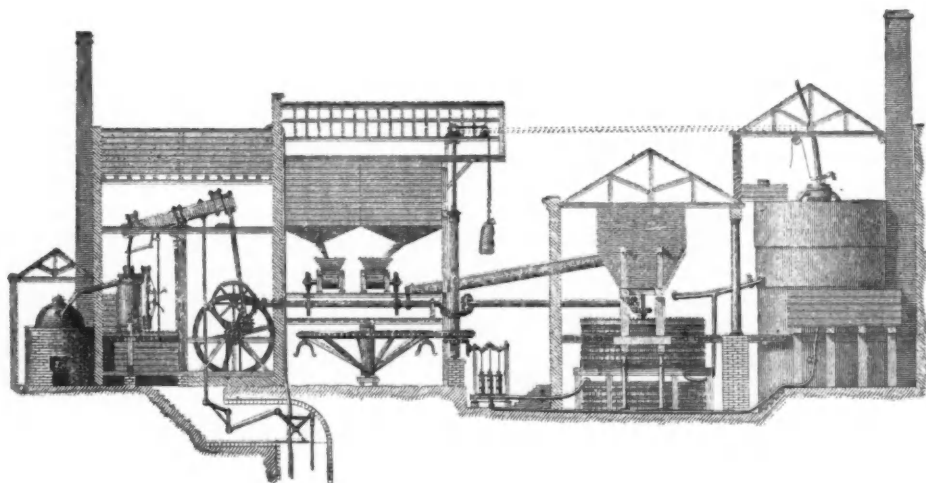
MISCELLANEOUS

Commercial firms will, by request Repeat ad lib their potter's best. But what a purer joy is traceable To making what is irreplaceable. The craft potter's journal is Pottery Quarterly. Autumn issue just out. Sample copy 3s 9d. Subscription 15s. Pottery Quarterly, Pendley Manor, Tring, Herts.

ADVERTISERS IN THIS ISSUE

BARCLAYS BANK LTD	4
BERESFORD & HICKS	64
BEST & LLOYD LTD	58
BRITISH ALUMINIUM CO LTD, THE	1
BRITISH GEON LTD	7
BRITISH INSTITUTE OF MANAGEMENT	64
CLELAND, WILLIAM W., LTD	60
DOLCIS STUDIO	14
EXPANDED METAL CO LTD, THE	9
FIBREGLASS	cover IV
GENERAL ELECTRIC CO LTD, THE	2
HILLE OF LONDON LTD	56
HOPE, HENRY & SON LTD	60
IMPERIAL CHEMICAL INDUSTRIES	cover III
JOSEPH, N. C., LTD	3
LEICESTER COLLEGE OF ART	66
LINE, JOHN & SONS LTD	10
LONDON TRANSPORT	8
LUMENATED CEILINGS LTD	11
MYER, HORATIO & CO LTD	66
ORIENT LINE	8
OXFORD UNIVERSITY PRESS	66
PEL LTD	60
PHILIPS ELECTRICAL LTD	5
REVO ELECTRIC CO LTD	6
STANTON IRONWORKS CO LTD, THE	13
STEWARTS & LLOYDS LTD	cover II
TURNER, ALBERT & SON LTD	62
WALKERS (SHOWCARDS) LTD	62
WALL PAPER MANUFACTURERS LTD, THE	56
ZINC ALLOY DIE CASTING ASSOCIATION	16

THE PORTER BREWERY



"Porter, a malt liquor, is a favourite beverage of the inhabitants of London, and other large towns. It has a deep brown colour and an agreeable flavour, which it is difficult to describe, our language having so few words expressive of different tastes. All the London porter is professed to be drawn from one butt, as indeed it was at first; but the system is now altered, and it is very generally compounded of two kinds. This mixture

the publican adapts to the palates of his several customers, and effects the mixture very readily, by means of a machine containing small pumps worked by handles.

An indifferent observer supposes, that since it all comes from one spout it is one-butt beer, as the publican professes over his door, and which vulgar prejudice has decided to be the only good porter, though the difference is not easily distinguished".

(Adapted from Rees's Cyclopaedia 1820)

Such is the diversity of I.C.I. products, they contribute not only to the most complex operations of industry but also to the common process of slaking the thirst. 'Drikoid' solid carbon dioxide, for example, is used to impart 'head' to bottled ales and 'fizz' to soft drinks; even in the hopfield, I.C.I. fertilizers are used to nourish the crop. And, in restaurant and tavern, other I.C.I. products — like 'Alkathene' beer tubing and the 'Vantoo' and 'Vantropol' washing-up bactericides — are behind the scenes, ensuring that the customer is served under the most hygienic conditions.



Moulding the future...

No dog, no vanman, no load—yet.

When they come, this B.R.S. van, built by Holmes Ltd. of Preston, will have a hard life.

And from road to roof it is ready to take it. The translucent roof especially: it is tough enough to take a poke from a pole or a bang from a box. It is made of Fibreglass Reinforced Plastic, the material that doesn't drum, dent or corrode, that can be moulded to complex shapes in one piece—without high pressures or costly equipment.

Fibreglass have an F.R.P. advisory service which is expert, confidential and free.



FIBREGLASS

the backbone of Reinforced Plastics

